THE BRISTOL

Medico-Chirurgical Journal.

MARCH, 1890.

THE RADICAL CURE OF HERNIA—

INGUINAL, FEMORAL, AND UMBILICAL.

BY

MR. GREIG SMITH.

In the following paper I desire to record as briefly as possible an account of personal methods employed in the radical cure of hernia. It is no part of my scheme to present well known operations before the reader by way either of comparison or of criticism; my purpose is simply to describe the operations as I have worked them out for myself.

I will say, at the outset, that in my belief the best results in all cases will not be got from a strict and unvarying adherence to any one method. I hold that a skilled and judicious surgeon, familiar with the anatomy of the parts in health and disease, and practically acquainted with the best means of using available tissues for definite purposes, will get the best results. In any

given case the details of several methods, selected and combined according as circumstances direct, will often be the best mode of getting a radical cure.

It will be necessary to treat of the leading varieties of hernia apart; but certain details common to all may be generally discussed.

Prolapse of the Mesentery.—The elaborate studies of Lockwood (*Hunterian Lectures*, May, 1889) provide us, for the first time, with really trustworthy data for estimating the influence of a prolapsed or elongated mesentery in causing hernia. This influence I regard as less potent even than Mr. Lockwood regards it. Anyone at all familiar with abdominal surgery soon becomes impressed with the fact that, in the living body at least, the mesentery is a very ductile—too ductile—structure, and will permit the intestines to roll out in coils through an opening made in any part of the parietes. We must remember that the mesentery is not mainly or primarily a ligament, but rather a vehicle for blood- and lymph-vessels. The bowels are not all slung up by the mesentery; indeed, a good part of the intestinal canal lies at the level of or above the mesenteric insertion. And, further, we must remember that measurements in the supine posture after death are no criterion of the excursus permitted in the varied postures assumed during life. As a matter of fact, it is when the pubes approaches the sternum and the anterior abdominal wall is shortened, as in lifting weights, that hernia is most frequently produced. In this position no mesentery is short enough to prevent the bowels, which always lie in contact with a possible hernial opening, from finding their way through it. For inguinal and femoral hernia, it is true that the bowel lowest down—that is, generally speaking, the

bowel with the longest mesentery—will first find its way through a hernial opening; but it does not follow that a long mesentery of itself, to any practical and estimable extent, predisposes to hernia.

An old intestinal hernia has of necessity a long mesentery; but I believe that to treat it wholly or partially by shortening the mesentery is a surgical mistake. For, in the first place we cannot deny to the mesentery the capacity which every fibrous tissue has of adapting itself in length to the distance it has to traverse; in other words, that if the bowel is kept reduced for a few weeks, it will become adaptively shortened. Here surgical shortening of the mesentery is a superfluity. And if in addition the ductility of the living mesentery be allowed, which can scarcely be doubted, we must admit that to closure of the hernial opening, and to this alone, must we look for an efficient radical cure.

The treatment of herniated omentum.—As it is universally agreed that omentum in a hernial sac ought to be removed and not reduced, no arguments in support of the practice need here be adduced. One point, however, demands emphatic attention and that is, the tendency to hæmorrhage which severed and ligated omentum shows on being returned to the abdomen. A surprisingly large number of examples of this accident have been recorded. I have had two in my own practice, fortunately detected and checked in time; and the experience has impressed me so forcibly that, as far as known surgical expedients can provide against the accident, I am determined never to have another.

The explanation of the bleeding after apparently satisfactory ligation is, that the centre of the stump, composed of folds of slippery omentum, retracts, and the

compression exerted by the ligature is thus inefficient. Several precautions may be taken. One is, to cut away the omentum beyond the ligature before the ligature is tightened; it is nearly always possible to pull the ligature more tightly after the distal portion is cut away. Another precaution is, to discard catgut and to use only silk. Catgut thick enough to bear much strain does not sink readily into the tissues; if thin enough to sink into the tissues, it will not bear sufficient strain. Besides, it is comparatively elastic. Silk should be used: it ought to be placed as several interlocking ligatures, each ligature enclosing a small piece of omentum; and the ligatures should be tightened after the distal portion has been cut away. Finally, a catch-forceps should be placed on the stump and let slip inside the abdomen with it; and the stump should be re-examined at the last moment, before closing the wound.

Omentum in large irreducible herniæ may, as is well known, go on growing in the sac, and sometimes attains to enormous dimensions. At the neck, however, there is always a sort of pedicle, comparatively free from fat, and here ligation is made. If the fatty tissue is abundant at the site selected for ligature, compression between the blades of large pressure-forceps will make a groove or sulcus, free from fat, in which the ligatures may be placed. It is often possible, even where the omentum seems to be a round cord, to open up folds of thin tissue through which the ligatures may be carried either by a blunt aneurism-needle or a sinus-forceps.

Some surgeons have recommended that the stump be fixed in the hernial opening. This practice I cannot endorse. It prevents perfect closure of the opening, acts as a sort of guide to the weak part of the wall, and

provides a band, fixed at both ends, over which intestines may become obstructed. An example of internal obstruction thus produced after herniotomy I have had to treat by abdominal section in the Bristol Infirmary. The ligated stump should always be returned into the abdomen.

Inguinal Hernia.—For the radical cure of inguinal ruptures two measures are, I believe, of prime importance:

(1) The utilisation of the sac so as to form a barrier *across* the inner opening.

(2) The closure of the hernial opening, with, where possible, a restoration of the valvular form of the canal.

Treatment of the Sac.—To remove the sac is, I believe, to remove a tissue, which may be converted into a most potent factor in the cure; in the case of very large herniæ, perhaps the most potent factor. To divide it at the neck and leave the scrotal portion *in situ*, as in Barker's method, is certainly a saving of labour, but it is a waste of means. In Ball's method of twisting, the loss of the sac is partly made up for by the increase of inflammatory thickening and the tightening-up of loose peritoneum which results from the twisting process. The superiority of Macewen's method to all others hitherto published depends, in my belief, on the fact that he utilises skilfully the sac as a barrier inside the hernial opening. Indeed, I doubt whether some of the subcutaneous methods, such as Wood's or Spanton's, which do not involve removal, would not compete favourably with any of the open methods in which the sac is removed.

Had Macewen's method been brought out before I had tried the method to be described, it is likely that I

should have at once adopted it. Now, seeing no reason for departing from my own method, I might venture on the criticism that the folded sac lying opposite the hernial opening might tend to act as a wedge and force the canal open again. Macewen, indeed, makes this criticism himself on his method. The coherent lump does not seem to be placed at the best mechanical advantage for preventing excursus of the bowels. Re-opening of the canal would seem to me to be best prevented by laying the sac across the opening, its extremities resting on and being fixed to the powerful tissues which lie beyond.

This is the most important feature of the method I advocate: the placing across the ring of the whole sac, or as much of it as may be necessary, and fixing it at the neck and the fundus by sutures passed through the parietes. As a simple and efficient means of bringing the walls of the sac together, and assuring the maximum amount of inflammatory adhesion, I recommend twisting of the sac.* Further, by twisting, it is possible to effect peritoneal closure much higher up than by any other method.

And now to describe an ordinary operation. I may say at once, that if the hernia is of the sort for which I advocate operation, it will not be an easy one. In the case of strangulated hernia, where the proceeding is carried out as a sequence to the main effort of relieving the strangulation, it is usually a very simple proceeding. But in large, or enormous, irreducible herniæ which totally incapacitate for work, or often show signs of

* The claim of priority of method is one which has always very little weight with me. I may say, however, that twisting the sac had been employed by me on a good many occasions before Professor Ball's method was introduced to the notice of the profession.

obstruction—and these are the cases I have chiefly had to deal with—the proceeding is one which may properly be classed among the grand operations of surgery. Here it is not part of my purpose to discuss the selection of cases for operation: I would simply say that I should refuse operation to no case of hernia, however large and however complicated, provided the abdominal cavity is large enough to hold the hernial contents. It is by these bad cases that a method must be tested; almost any method will give a fair per-centage of cures in simple cases.

An incision of suitable length, from two to four inches or more, is made over the neck of the sac, as in ordinary herniotomy. It is, however, carried higher up the abdomen, and at the upper end may often with advantage be curved outwards a little way. The neck of the sac is first isolated; this is done first that the position of the spermatic cord and vessels may be determined, and avoided in all future steps. Where it is possible to do so, the next step should be to hook the finger around the neck of the sac, pull it forwards, and by a little manipulation to turn the scrotum inside out. The whole hernia is now on view, and is carefully surrounded with warm antiseptic sponge-cloths. The sac is now isolated by dissection and tearing from above downwards, the cord being carefully freed and left with a full share of areolar tissue around it. If there is doubt at any point as to the limits of the sac, it should be at once opened, and the finger inside made to serve as a guide. If the hernia is reducible, it is returned when the sac has been isolated; but before twisting the sac an opening should be made at its fundus, through which the finger is inserted to make certain that the hernial contents are completely returned.

If the hernia is irreducible, the sac is laid freely open upwards and downwards by scissors through an opening that has been made at a part where the contents are not adherent. To avoid points of adhesion to underlying parts, the incision may have to be guided in lines that are not straight. To give additional room, and to minimise the bleeding from adhesions, it is usually best at once to ligature omentum at the neck where it is free from adhesions, divide it and at once return the stump with a long catch-forceps temporarily attached to it; on the distal side a forceps also is placed.

Then the subsequent steps of liberating adherent bowel and returning it, or of separating omentum from sac or bowel, or both, are proceeded with as circumstances direct. Some adhesions may be sponged apart; others require tearing and forci-pressure; while others demand ligation. The field of operation should be kept warm and isolated and clean by frequently changed sponge-cloths or large flat sponges.

All bowel being returned, and all omentum having been removed from the interior of the sac and all bleeding having been checked, the fundus of the sac is grasped by two pairs of forceps, which are handed over to an assistant, who holds them well to the inside or the outside as the case may be, and rotates them as he is directed, thus twisting the sac. By turning the sac to one side or the other, and pulling more on one forceps than another, the peritoneal opening, may be closed at one or other side of the hernial opening as we may desire, and not opposite to the opening. The assistant having given two or three turns to the sac, the forefingers, behind (feeling the cord) and in front, tease open the areolar tissue separating the neck of the sac from the

inner parietes as high up as may seem desirable. Twisting, by gathering together the walls of the sac, very materially aids this process of separation. If the sac is exceptionally long, a piece of its fundus may be cut away. If it is very thin, it should not be twisted very tightly, in case vascular stasis and necrosis result.

The twisted and fully isolated sac now lies in the ring, with forceps attached to its fundus. (Fig. 1.) Silk ligatures, with needles at both ends, are now placed, one ligature at the fundus, another at or above the neck of the sac. The ligature at the fundus is made to pass several times through both walls of the sac. The ligature, or rather suture, at the neck is made to gather together a sufficiency of areolar tissue on the sac. There is no strong objection to its perforating the sac; but it should not be made to surround it, on account of the risk of sloughing.

The sac is now laid across the opening, as nearly transversely as possible, and fixed by the sutures at its extremities to the firm parietes beyond. In the drawing (Fig. 2) the fundus of the sac is represented as being fixed on the inside; but as often as not the reverse position is advisable. The aim is, to get the internal orifice of the twisted sac opposite the strongest part of the parietes, and away from the internal opening. As a general rule, it is best to twist in a line opposite to that of the axis of the canal. But no absolute rule is possible; each case must be dealt with according to its peculiarities. By means of the curved needles, held in a needle-holder, or by a handled needle like that of Macewen, the sutures are passed through the parietes under the retracted skin. The position of the deep epigastric is first ascertained and avoided. It is usually best to fix the fundus first. Supposing, as in the figure, the fundus is paced to the inside, the fore-

finger of the left hand is carried upwards under the conjoined tendon, carefully separating the peritoneum. The finger acting as a guide, the needles are made to pass through the conjoined tendon and aponeurosis of the external oblique; or, if the hernial opening is large and the sac not small, through the rectus. They are made to take a good hold of the tissues, the sutures being at least half an inch apart. During this manœuvre the skin and superficial fasciæ are drawn inwards. The forceps are removed and the sutures pulled tight, while the attached fundus is guided into position. The sutures are now tied.

The forefinger of the right hand is now carried under the peritoneum on the outer and lower side of the opening, separating the peritoneum in the same way, and the sutures at the neck are introduced as far outwards and downwards as possible. If possible, they should be made to grasp Poupart's ligament and such fibres of the internal oblique and transversalis as may be within reach. When these sutures are tied, the sac is drawn completely inside the canal and lies obliquely across it. It fortunately happens that a large hernial opening is usually associated with a large sac, so that the available tissues are provided in necessary quantity. The dimensions of the sac must, however, be taken into account in fixing on the points for placing the sutures.

In small or even in moderately sized herniæ it is not necessary to place a fixation-thread at the neck if the twisting is made to begin well to the inner side of the internal opening. This thread may be omitted also if the sac is very thick and the areolar tissue dense.

The inguinal canal is now closed. (Figs. 2 and 3.) Macewen's method of closing the internal ring is recommended. But in very large herniæ, in which the

edges of the opening are surrounded by thick areolar—almost cicatricial—tissue, it may be impossible without dissection to isolate the conjoined tendon or the fibres of the internal oblique and transversalis. This dissection may be done and the layers caught; but I believe it will be found sufficient to push the points of the needles obliquely upwards through the internal pillar, taking in as much of the deep muscular layers as possible. On the under aspect of the opening the needles are passed, where possible, under Poupart's ligament, which is raised forwards out of danger by the forefinger. The cord meanwhile will have been observed to be out of danger. Three, four, or five sutures, according to the size of the opening, will be sufficient to close it. The fibres of the external aponeurosis will be crowded together (as in the diagrams, Figs. 1 and 2) and adherent. If it is difficult to close the opening, a few incisions made along the fibres will free them; and when the sutures are pulled tight, the opening is easily closed and their parallelism restored. (Fig. 3.)

In congenital hernia certain variations in procedure are essential. The sac is completely divided just above the testicle, leaving enough tissue to form a tunic proper to the gland. A few sutures may serve to fix this tunic in proper position. If, as is not uncommon in these cases, the cord is firmly adherent to the sac, or lies in a special sulcus, then it is best to cut the sac completely away from the cord, leaving a long strip of sac attached to it. Division is carried well inside, and the sac may be twisted and otherwise dealt with as if it were entire. In some congenital herniæ there is a small neck, and perhaps a large mass of omentum in the sac. In three of these I have cut the sac into two long flaps or aprons, and fixed

the extremity of each flap on opposite sides of the hernial opening without twisting. The result has been equally good.

The cutaneous wound is closed over a drainage-tube carried to the bottom of the wound on the abdominal aspect. Pressure over the ring induces œdema of the scrotum; a simple absorbent dressing, fixed with strapping, is sufficient. The scrotum rests elevated on a pillow of wool laid over a broad piece of strapping fixed to the top of the thighs.

At the end of three weeks or thereabouts the patient is permitted to get up and walk about. The wearing of a truss I believe to be detrimental. A truss undoubtedly causes atrophy of the tissues it presses upon. In the face of all surgical experience that elastic pressure is one of our most potent means of causing absorption of inflammatory thickenings, it is idle to argue that a truss will not do so here. Nothing causes a chronic indurated bubo in the groin to melt away so quickly as the wearing of a truss over it; and if we want our traumatic inflammatory thickening to remain strong and dense as long as possible, the wearing of a truss is the last measure we should adopt. To have to make the patient wear a truss at any time after operation is tantamount to a confession of failure in the operation—partial, and perhaps complete.

Femoral Hernia.—In this variety of hernia I use the same method of placing the twisted sac across the opening—only that no attempt is made to close the opening, and the neck is not fixed. One side of the sac is pulled well down, and torsion made in the opposite direction. The fundus of the sac is attached either on the outside above Poupart's ligament, or directly above

the ring, or to the inside. I have never had to perform the radical cure on a femoral hernia that was not strangulated; and I have seen only one such operation, by one of my colleagues. The proceeding is extremely simple, there being no cord to consider, the opening always being small (except in some cases that have been operated upon for strangulation), and the sac in the majority of cases easily isolated.

Umbilical Hernia.—The operation which I recommend for umbilical hernia is, to remove the whole sac, with all superfluous cutaneous and fatty tissues, and to bring the wound together exactly as in an ordinary abdominal section.

A large umbilical hernia in a stout woman (which is the hernia we are usually called upon to treat) is always a complicated affair. It will contain bowel and omentum, not in one simple sac but in many recesses, partially separated by thick septa, and the contents, septa and sac, matted together by old and dense adhesions. These recesses burrow under the skin in the abundant fatty and areolar tissue in all directions. Irreducible omentum may attain to enormous dimensions in such a sac, while its pedicle may remain small: it derives nourishment from the numerous adhesions which it forms to the sac as well as from its pedicle. The pedicle of the omentum is naturally, in most cases, on the upper aspect of the umbilical opening and the bowel below it. Bowel may be found coiled up in recesses at any part of the sac, adherent or non-adherent.

Usually at the most prominent part of the tumour there is a piece of very thin skin, freely movable over the hernial contents; the first incision is made vertically

through this. (Fig. 4.) The bowel or omentum being exposed, the incision is prolonged upwards and downwards to the extreme limits of the sac by scissors guided by the forefinger.

Through the hernial contents we now seek for the hernial opening. Any reducible bowel is at once returned; and if it seems easy to liberate the whole bowel by separating a few adhesions, this may at once be done and the whole pushed through the opening. If the intestinal adhesions are dense and abundant, it is best to proceed at once to the next step; namely, ligature and division of the pedicle of the omentum. The pedicle is carefully unravelled, to make certain that no bowel is embedded in it, and the ligatures applied in the manner already described. A catch-forceps prevents bleeding from the distal half. It is unnecessary to separate omentum from sac, as the whole is to be removed when the bowel is completely returned. A flat sponge placed inside the umbilical opening prevents protrusion of bowel and collects any extravasated blood.

All the thin superfluous skin is now removed, along with the adherent underlying sac; and this may be done freely (see Figs. 4, 5, 6, 7), for the surrounding skin is usually very elastic and easily stretched. The rest of the sac, with its contained and adherent omentum, is removed (Fig. 4) by free incisions, rather than an elaborate dissection, down to the umbilical opening. If the umbilical opening is not large and its surrounding fibrous tissue not very dense, it may at once, after its edges have been pared, be closed by single sutures carried through the skin under the areolar tissue, which marked the limits of the sac, and through the edges of the ring in the manner shown in Figs. 5 and 7. When the sutures are tied,

the wound in section then appears like one closed after an ordinary median abdominal section. (Fig. 6.)

But if the opening is large, or its margins dense and cicatricial, then the use of a large flange-stitch (Figs. 8, 9, 10), either separately or in conjunction with the general suture, is advisable. The cicatricial tissue is divided all round the opening at its free margin down to the rectus muscle, whose margin may bulge well into the wound. The suture is made to pass, first through the upper fibrous edge, then through the rectus, then through the lower fibrous edge of one side; and in reverse order through the tissues on the other side. (Fig. 9.) When closed, the wound should present the appearance shown in Fig. 10. In order to strengthen the umbilical opening as much as possible, and also to exert vertical traction on it, the parietal sutures are placed as shown in Fig. 7. Even if the umbilical opening is separately sutured, it is better to carry the cutaneous sutures at least a little way into the muscle.

The sutures are all placed in position before being tied, and the sponge is removed before tying them. I would suggest as a final proceeding that the finger be passed inside and made to examine the parietes all round the opening, and especially directly above and below it. This is to make certain that there are no small herniæ through the linea alba. By doing this in one case, I avoided what might have been a catastrophe. The patient, under the care of Mr. Kinneir of Malmesbury, had several times had symptoms of obstruction, almost of strangulation, in the sac. I operated in one of these attacks. To our surprise, no evidence of strangulation was found in the abundant bowel which protruded, and the operation as above described was carried out; the

sutures were inserted, and the sponge removed. Omentum, sac, and fat removed (the lady was very stout) nearly filled a small washing-basin. Still feeling doubtful as to whether the strangulation had been removed, I inserted my fingers into the cavity, and found a small knuckle of bowel passing through and firmly gripped in a hernial opening about two inches above the umbilicus. The incision in the skin was prolonged upwards till it was exposed, the sac was opened, and the bowel was found distinctly strangulated. The opening was nicked at the upper margin of the opening, and the bowel fell back. A couple of stitches closed it. Another case, under the care of Dr. Davis, of Clevedon, had several—at least two—openings besides the umbilical one. This one was complicated by the presence of a very large—partly calcified, partly cystic—fibroid tumour of the uterus, which hung down over the thighs, and had to be removed. The hernia, it need scarcely be added, was not a simple one to deal with.

In the case of umbilical hernia I do not advise the utilisation of the sac, for two reasons: firstly, because it is not wanted, as there is abundance of thick, strong tissues without it; and secondly, because I should dread its sloughing, as it must be separated from its chief source of vascular supply.

Certain details in each case may properly be varied. Thus, in a very stout woman, I have removed a wedge of fat along each side of the opening, and brought the parts together without attempting to carry the suture to the extreme depths of the wound. In a circular opening, with dense, almost cartilaginous, margins, an incision may be made into the ring all round, so as completely to liberate the recti and render it possible for their margins

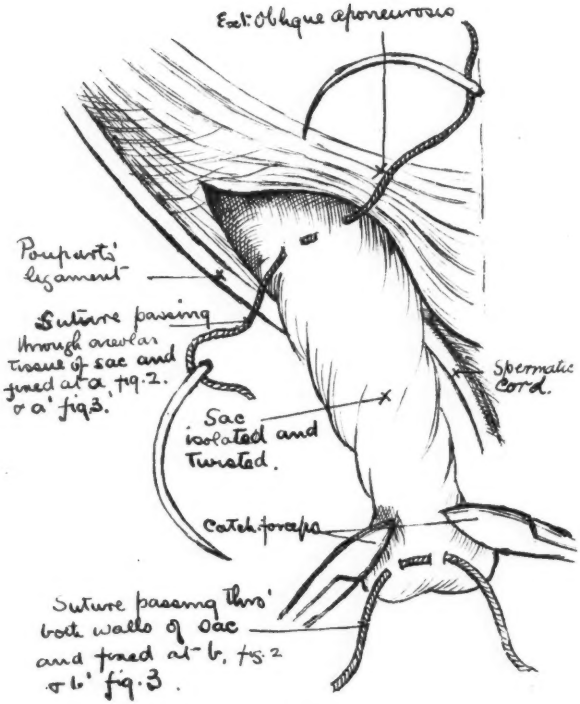

Ext: Oblique aponeurosis
Poupart's ligament
Suture passing through areolar tissue of sac and fixed at a, fig 2. & a' fig 3.
Spermatic Cord.
Sac isolated and Twisted.
Catch forceps
Suture passing thro' both walls of sac and fixed at b, fig 2 & b' fig 3.

Fig. 1.

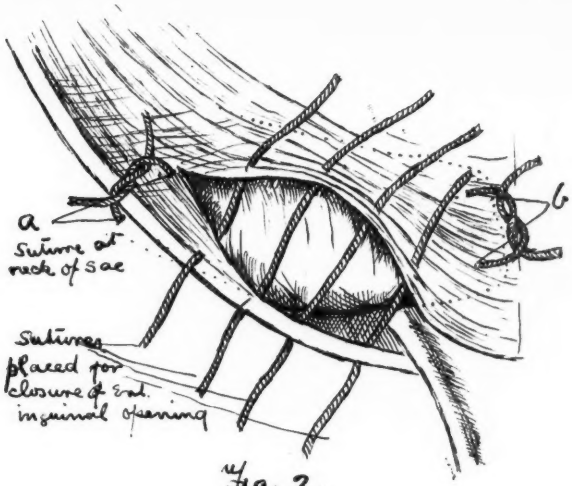


Fig. 2.

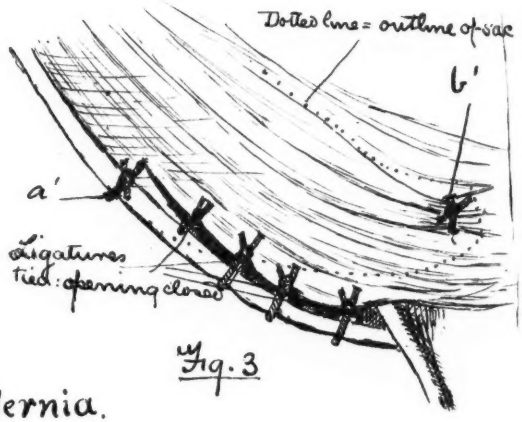


Fig. 3

Oblique Inguinal Hernia.

To illustrate Mr Greig Smith's paper

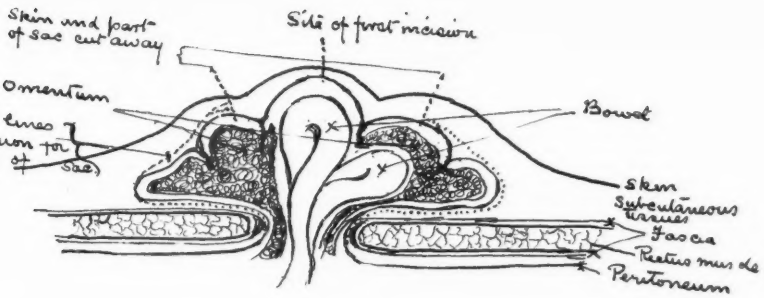


Fig. 4

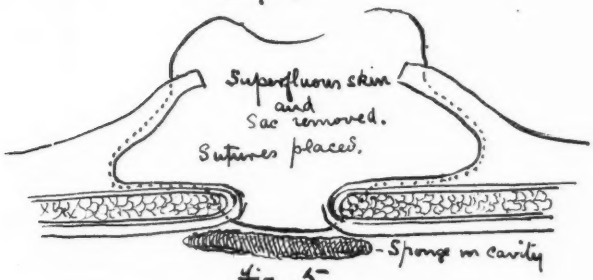


Fig. 5

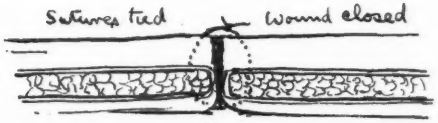


Fig. 6.

Figs. 4, 5 & 6. Umbilical Hernia - Transverse section, showing lines of incision, and placing and tying of sutures.

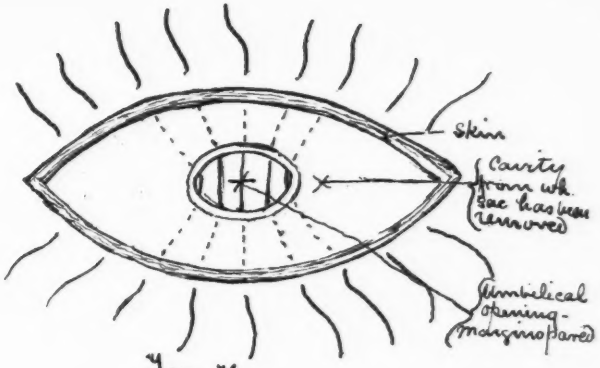


Fig. 7

Fig 8

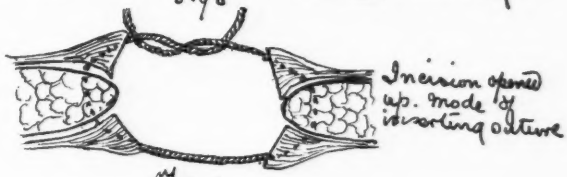


Fig. 9

Fig. 10.

Figs. 7, 8, 9, 10. Umbilical Hernia. Details of suturing.

per on the Radical cure of Hernia.

almost to fall together. The fibrous edges of the ring may then be ignored. After all, there is no barrier against hernia so efficient as muscle.

The cases I hope to relate in a future paper. Suffice it here to say that the results thus far, extending over a period of six years and embracing about thirty cases, in the hands of my colleagues and myself, have been such as fully to warrant the operations being recommended to others.

THE SEQUELÆ OF SUPPURATIVE OTITIS MEDIA*

BY

F. H. EDGEWORTH, B.A., M.B. (Cantab), B.Sc. (Lond.),

Physician to the Bristol Hospital for Sick Children and Women; Scholar of Cains Coll., Cambridge; Late Medical Tutor, Bristol Medical School.

THE chief interest of suppuration in the middle ear arises from its liability of spreading to neighbouring important structures. The determining factors of this are the intimate relations of the lining mucous membrane with the circumjacent bone; for the deeper layer of this forms the endosteum, and sends processes into the bone, so that an inflammatory change is most easily propagated to the bone. The causes of this propagation lie chiefly in the want of free removal of inflammatory products of the mucous membrane: though the membrana tympani be perforated, the tympanic cavity is at the bottom of a long narrow channel, so that stagnation readily occurs; and once inflammation has spread to the bone, the carious and necrotic products are with difficulty discharged, and the inflammatory change progresses further. Such a process would be of less importance in any other bone, but the petrous portion of the temporal bone occupies a unique position in that it has relations with important

* This paper is—with a few additions due to later researches—a thesis read for the degree of M.B. (Cantab) in Easter Term of 1889. It is an attempt to summarise our present knowledge of the various complications which may result from suppurative otitis media.

structures. Thus a very thin roof separates the tympanic from the cranial cavity opposite the under surface of the temporo-sphenoidal lobe of the brain. A thin plate of bone anteriorly separates the middle ear from the carotid canal. On the inner side, two membranes only separate the tympanic cavity from the internal ear, whence there is easy communication with the cranial cavity. Posteriorly the tympanic cavity opens, at all ages of life, into the mastoid antrum; while in adults the large mastoid process, often with pneumatic spaces communicating with the antrum, readily becomes the seat of consecutive morbid changes. The mastoid antrum is close to the lateral sinus, only separated by a thin lamina of bone. Owing to these relations it will be evident that inflammatory change has but to spread a little way through the walls of the tympanic cavity to light up most serious mischief.

It is the object of this paper to treat of the diagnosis and principles of treatment of the various sequelæ which arise from these extensions of middle-ear suppuration.

Some of these sequelæ have long been known, and are readily diagnosed and treated; others, though long known as sequelæ, have only within the last two or three years been recognised during life and successfully treated. This is more especially true of brain abscess.

These sequelæ may be enumerated, as follows:

1. Pent-up pus in the middle ear, with occasionally supramastoid abscess.

2. Caries of either the petrous or mastoid portions of the temporal bone. Polypi.

3. Abscess between the dura mater and temporal bone.

4. Bleeding from the carotid artery.

5. Thrombosis of the carotid artery.

6. General septic meningitis.

7. Thrombosis of cerebral sinuses, with septicæmia or pyæmia.

8. Cerebral abscess.

9. Cerebellar abscess.

These sequelæ are, with the exception of 4 and 5, put down much in the order in which they are likely to occur in cases of chronic suppurative otitis media. In acute suppurative otitis media brain abscess rarely forms, caries does not occur so commonly, whilst pent-up pus in the middle ear, meningitis, and thrombosis of sinuses are very frequent.

1. *Pent-up pus in the middle ear, with occasionally supramastoid abscess.*—In cases of acute suppuration in the middle ear, the membrana tympani may not readily give way. In such a case, meningitis or sinus thrombosis, or both, readily occurs from extension of inflammation inwards; but, apart from this, severe symptoms may arise from retention of the products of an acute suppuration in the middle ear, such as hardly to be distinguished from those of septic meningitis, and yet proved not to be due to this by their subsidence on perforation of the membrana tympani. Such symptoms may be: great pain in the ear, tinnitus, vertigo, delirium, associated with fever and often severe rigors. And in one or two cases it is said that optic neuritis has occurred. The explanation of this last symptom is very difficult; and, indeed, the cerebral symptoms are such that, although it is not possible to suppose that suppurative meningitis occurs in these cases, yet they seem to indicate some special cerebral irritation, possibly of the nature of a meningeal sapræmia. The treatment of such cases of acute suppurative otitis media with retention of pus is easy: on inspection, the mem-

brana tympani is seen bulging and opaque; on incising this, preferably in the postero-inferior sector, pus will escape. The middle ear should then be well syringed out. The symptoms due to the pent-up pus will soon abate; and if meningitis or sinus-thrombosis has not occurred, the patient will quickly recover.

In such cases of pent-up pus in acute suppurative otitis media, inflammation may spread, probably through lymphatic channels, outwards along the walls of the external auditory meatus to the tissues over the mastoid process, and an abscess will form. There will first be a painful swelling of the tissues behind the ear, which may extend over the upper part of the side of the neck. Then fluctuation will be detected over the mastoid process. Such an abscess is accompanied by fever, which only subsides on the bursting or evacuation of the abscess. It may be somewhat difficult, before operation, to diagnose such a supramastoid abscess from an acute suppurative periostitis of the mastoid process: the former, however, only occurs in those cases of acute otitis media where the membrana tympani does not readily give way; whilst the latter generally, though not always, occurs in the course of a chronic otitis media which has spread to the mastoid cells. On operation, however, the distinction is easy, if the finger be introduced: in the supramastoid abscess, the mastoid process is felt in a perfectly normal condition forming the floor of the abscess. Such an abscess will quickly close on incision and drainage.

2. *Caries and necrosis of the temporal bone.*—The causes of this have been already stated, together with the effects of its spreading towards the interior of the skull. The inflammatory change undergone by the bone is a chronic septic suppuration—caries and necrosis take place. This

carionecrosis will in many cases be confined to the inner wall, affecting the promontory and the Fallopian aqueduct: in such cases there will rarely be any blocking of the discharge, the nature of which is characteristic; it is a cream-coloured offensive fluid, containing larger or smaller particles of bone in suspension. Often this discharge is the only sign that the bone is affected—the pain is slight, or more generally absent, and there is no febrile disturbance. The inflammation may spread to the Fallopian aqueduct, causing paresis or paralysis of the facial nerve, with loss of taste in the anterior two-thirds of the tongue.

The treatment of such uncomplicated cario-necrosis of the tympanic walls is simple and generally successful. Its principles are: the complete removal of secretions, and the application of antiseptics to the carious surface. It is sometimes needful to trephine the mastoid, so as to get free drainage of the middle ear: if this be done, the most obstinate cases will generally quickly heal.

The discharge through the auditory meatus is in such cases often partially blocked by *polypi*, which are chiefly of importance on this account. They can easily be removed by a pair of forceps or sharp spoon.

The chance of stagnation of discharge becomes much greater if the inflammation attack the antrum and the mastoid process. If the discharge is unimpeded, the inflammation gives rise to no special symptoms; but if retention takes place, reactive phenomena arise. If the inflammation does not spread outwards to the surface, there will be no mastoid swelling; but tenderness on pressure over the mastoid will exist, together with pain in the mastoid region, and fever with possibly some signs of cerebral irritation. If the inflammation progress outwards, there will shortly arise a swelling behind the ear,

hot and tender to the touch—at first hard, afterwards fluctuating: an incision being made, pus and bony *débris* will be found as an abscess beneath the periosteum; by slight scraping, communication is easily made with the middle ear. Under such drainage, healing soon takes place.

The term "trephining the mastoid" might be reserved for those cases in which, to reach the pent-up pus in the mastoid, no external guide in the shape of a subperiosteal swelling exists. The great danger in such an operation is injury to the lateral sinus: in order to avoid this, the mastoid should be trephined immediately behind the posterior border of the opening of the auditory meatus, and not higher up than its superior border; and gouging should take place forwards and inwards, *i.e.* parallel with the meatus. In such a direction the bone may be safely pierced to the depth of 1½ c.m., within which distance the pus is almost invariably found, and communication with the middle ear opened up by way of the mastoid antrum. The result of such trephining operations has been most uniformly successful, the suppuration ceasing on the thorough drainage. In rare cases pus pent up in the mastoid does not extend externally, but downwards, so as to burst on the infero-internal surface of the mastoid, *i.e.* beneath the deep cervical fascia. This leads to a painful infiltration of the side of the neck, with formation of abscess.

3. *Abscess between the temporal bone and dura mater* ("Subdural" of Barker).—Cario-necrosis of the mastoid cells may in some cases extend inwards, leading to the formation of pus between the bone and dura mater. This is more particularly apt to occur in chronic badly-drained cases.

The pus in such cases is usually found either over the roof of the tympanum, close to the squamo-petrous suture, or on the posterior surface of the petrous bone, *i.e.* in the groove for the lateral sinus; or it may extend from one to the other of these places.

The symptoms point to the local suppuration: there will be fever, and the patient will complain of pain over the temporal bone; and there will be found tenderness and œdema over the mastoid or squamous portions of the temporal bone.

This will lead to trephining the mastoid; but it will be found that the symptoms persist after this, for the pus is not drained away. If this occurs, the two following operations must be done: first, gouging the squamous portion of the temporal bone ½ in. above and behind the auditory meatus; and if pus is not found there, gouging the mastoid ½ in. directly behind the auditory meatus. If pus underlie the bone, this will very probably be found spongy, and pus will ooze out before the abscess is reached.

The evacuation of the pus will lead to the prompt abatement of the symptoms.

4. *Hæmorrhage from the carotid artery.*—A few instances have been recorded of caries of the temporal bone progressing forwards, opening up the carotid canal and causing bleeding from the internal carotid artery. The symptoms will be sufficiently obvious: bright arterial blood will issue from the meatus synchronously with the pulse.

Ligature of the internal carotid is of very little use, by reason of the intracranial and extracranial anastomoses of the artery. Plugging the meatus may arrest the bleeding for a time. Such cases have been uniformly fatal.

5. *Thrombosis of the internal carotid artery.*—A unique case has been recorded by Gairdner, in which caries of the petrous bone from middle ear disease caused thrombosis of the internal carotid artery, and so minute embolic lesions of that side of the brain. The symptoms were: sudden rise of temperature to 103°, hemiplegia, and progressive coma—going on to death within twenty-four hours.

6. *General meningitis.*—The ear disease which gives rise to meningitis is much more often acute than chronic, in this offering a marked contrast with cerebral abscess. The inflammation is a lepto-meningitis—a septic purulent inflammation of the pia-arachnoid, which is set up by direct extension from the septic focus in the middle ear, either through the tympanic roof, or by the internal ear, or through the mastoid cells. The inflammation may be limited to the convexity of the brain, or, more rarely, to the base; most commonly it becomes general.

Of the symptoms, some are independent of the exact locality of the meningitis: of these the more important are, headache, delirium, vomiting, general convulsions, hyperæsthesia of skin and special senses, optic neuritis. *Headache* may be frontal or general; it may undergo exacerbations, causing a characteristic shriek or cry; it is characteristic of the headache that it does not cease as delirium comes on, but persists until the patient becomes comatose. The *delirium* may be noisy or quiet; it is usually well marked. *Vomiting* is generally an early symptom; it has all the characteristics of "cerebral" vomiting. General *epileptiform convulsions* occur whether the meningitis be localised or general. *Hyperæsthesia of skin*, and more particularly of ear and eye, occur, so that, *e.g.*, the slightest sound or light causes pain.

It is questionable whether optic neuritis is a general cerebral symptom; it occurs but rarely when the meningitis is confined to the convexity of the brain, whereas it is very common if the meningitis be basal. If the meningitis be basal, there occur characteristic symptoms: contraction or inequality of the pupils, with ptosis and defect of ocular movements, due to involvement of the oculo-motor nerves by the inflammation; if the meningitis spreads backwards down the cord, there arise symptoms of cervical meningitis.

A meningitis of the convexity of the brain will affect the motor areas, causing muscular rigidity, hemiplegia or paraplegia, with convulsions unilateral or bilateral.

Pyrexia is always present, and may reach a high degree, *e.g.* 104° or 105°, within a few hours of the onset of the meningitis; and it remains high, often running up still higher before death. The *pulse* is very variable, most often frequent, but bearing no constant proportion to the temperature. The course of such a general purulent septic meningitis is very acute; it invariably destroys life in a few hours or days. The symptoms of cerebral irritation—headache, delirium, convulsions—pass into a fatal coma.

The differential diagnosis of meningitis has to be made from (1) acute pent-up suppuration in the middle ear—this has been already treated of; from (2) acute temporo-sphenoidal and cerebellar abscess—this will be referred to later on; from (3) sinus-thrombosis—this often co-exists with meningitis, but when absent may be excluded by the absence of extracranial extension of clot and of secondary abscesses.

7. *Thrombosis of cerebral sinuses, with septicæmia or pyæmia.*—This may be a sequel of either acute or chronic

middle ear suppuration. The veins of the middle ear pass in two directions—into the temporo-maxillary vein, and into the superior petrosal sinus; whilst from the mastoid cells veins pass into the lateral sinus. Hence, from the middle ear or mastoid cells, septic thrombosis of the veins readily spreads into these sinuses. Such an event, though not dependent on, is yet often associated with or preceded by caries of the temporal bone; for the conditions which give rise to each are the same, *i.e.* retention of inflammatory products.

Thrombosis of the superior petrosal sinus readily spreads upwards to its tributary cerebral veins, forwards to the cavernous sinus and ophthalmic vein, and backwards to the lateral sinus. Thrombosis of the lateral sinus spreads to the mastoid emissary vein and to the internal jugular vein. The clot is septic; hence, whether or not there be an accompanying meningitis, this latter condition often arises secondarily to the thrombosis, by spreading of inflammation through the sinus walls.

From the same reason, general septic inflammation of the blood usually takes place, causing septicæmia or pyæmia. In about one-half of the cases there are secondary purulent deposits—most often in the lungs.

The effects of the sinus-thrombosis on the cranial circulation and brain will be small, by reason of the free anastomoses of the cerebral veins. Thrombosis of the cavernous sinus and ophthalmic vein will cause proptosis, œdema of eyelids and conjunctiva, œdema of face with dilitation of facial veins (due to the diversion of the orbito-facial circulation), together with supraorbital neuralgia and defect of ocular movements from interference with the nerves round the cavernous sinus. If the clot extend to the opposite cavernous sinus, similar effects

will appear on the other side of the face. The effects of extension of the thrombosis to the mastoid emissary vein will be tenderness and œdema over the mastoid foramen. A clot in the internal jugular vein will cause tenderness and œdema extending down its course.

Septicæmia or pyæmia will be evidenced by rigors, with fever, remittent or intermittent, profuse sweating, typhoid aspect, together with signs of abscesses, if metastatic deposits take place.

Meningitis will be evidenced by its ordinary signs: high temperature, headache, vomiting, various paralyses, with general or localised convulsions, ending in coma and death.

In any case, then, of sinus-thrombosis the symptoms may vary to a great degree: they may be chiefly those of extracranial extension of clot with those of pyæmia or septicæmia; or there may be those of septicæmia or pyæmia, but no signs of extracranial extension of clot; may be chiefly those of meningitis with extracranial extension of clot, and with or without those of septicæmia or pyæmia. The difficulty of diagnosis will correspondingly vary.

In any case, however, in which there are no signs of extracranial extension of clot or of secondary abscesses, the mastoid should be trephined and thorough drainage of the middle ear thus secured; for mastoid retention may give rise to almost indistinguishable symptoms. If after this the symptoms persist and point unmistakably to sinus thrombosis, the prognosis is hopeless; for the focus is a septic clot which cannot be got at.

(To be continued.)

Clinical Records.

A CASE OF FACTITIOUS URTICARIA.* By HENRY WALDO, M.D. Aberd., M.R.C.P. Lond.; Physician to the Bristol Royal Infirmary, and in charge of the Department for Skin Diseases.

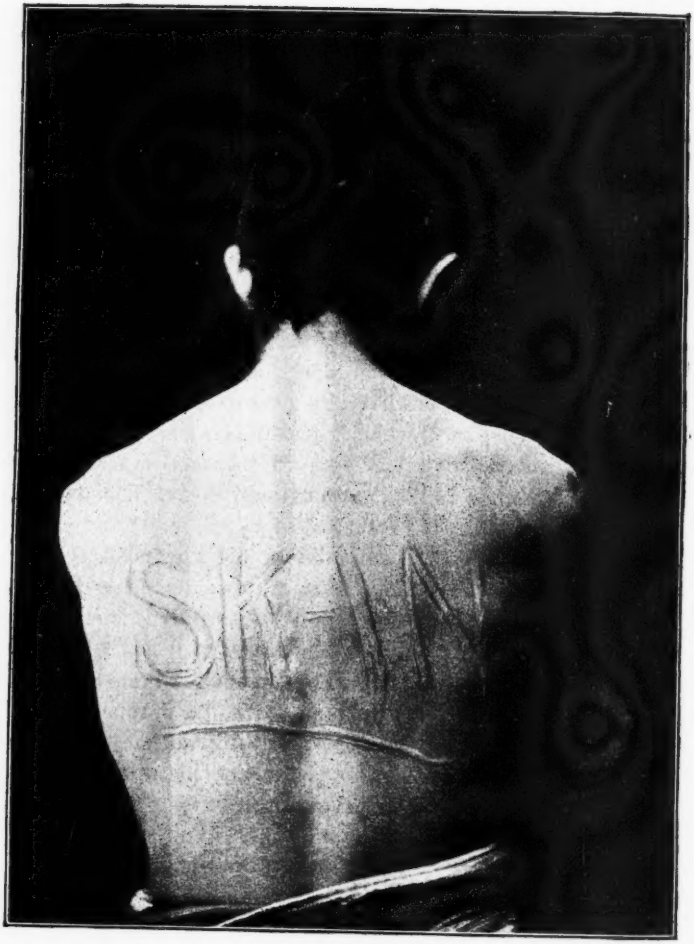
The subject of this condition is a male patient, a confectioner, æt. 29. There is such excessive irritability of the cutaneous nerves, that wheals can be excited by local irritation. If letters are inscribed with any bluntly-pointed instrument, white letters with pink borders stand out in bold relief on the skin. (See Engraving over.)

Patient is the subject of acute dyspepsia; he says he has so much pain in his chest at times, that if in bed he is obliged to get up and walk about.

His tongue is coated and relaxed, and the bowels confined. In his business he is subject to sudden alterations of temperature. He complains of a constant intolerable itching all over the skin.

The etiology of this affection is much the same as the etiology of ordinary urticaria, and may be produced by insect bites, or by any kind of external irritation. Many articles of food, by causing irritation indirectly, and medicines of many kinds act in the same way. There is often a predisposing idiosyncrasy on the part of the patient. The gouty diathesis is considered to be a predisposing cause, and there is often defective digestion habitually present. As regards emotional conditions, there is reported the case of a lady in whom the advent

* Read before the Bristol Medico-Chirurgical Society.


SKIN

of strangers produced urticaria; and this sensitiveness increased, until a knock or ring at the front door would determine an immediate outbreak. Urticaria is frequent in jaundice; it is not unusual in albuminuria and glycosuria; and it has been found in association with rheumatism, purpura, and in intermittent fever.

Everything in urticaria points to its being primarily a vaso-motor disturbance, direct or reflex, central or peripheral. The course of events is probably this: A spasmodic contraction is followed by paralytic dilatation of the vessels, and stasis or retardation of the circulation in the papillary layer. Serous exudation then ensues, producing acute œdema, which lifts up the epidermis into a wheal, which is pink at first; but as the fluid increases, the blood is pressed out at the centre, which becomes white, while the periphery is all the more hyperæmic. Whether the muscles of the skin take part in the process is doubtful; but it is supposed by many that they, by their contraction, limit the œdema and increase the prominence of the wheal.

Unna thinks the wheal is produced by a spasm of the large veins of the skin, which normally serve to carry off the lymph.

This patient has been treated with stomach sedatives, and stomachics with saline aperients, and dieted; and he is very much better in himself, and his skin is much less irritable, but the artificial urticaria is still easily produced. He has also taken strophanthus and cannabis indica. He has found benefit from the local application of carbolic acid, dusting powders containing camphor, and liq. carbonis detergens, diluted. The neurotics, belladonna and atropia, which act on the vaso-motor centres, are necessary in treating some of these cases.

FACTITIOUS URTICARIA.

By ALFRED J. HARRISON, M.B.(Lond.), Physician to the Bristol General Hospital.

The subject of "Factitious Urticaria" is a remarkable one, whether looked at from a dermatological or a physiological point of view, or from its comparative rarity.

That we should meet with persons who have a skin so sensitive as to resent the slightest irritation, appears, perhaps, more surprising than that the gastric mucous membrane should occasionally be subject to intense excitement at the presence of various articles of food. We seem to expect the skin to resist pressure and irritation as one of its functions, and are therefore surprised when the phenomena of factitious urticaria occur.

There is no doubt that persons are more prone to it in the adolescent period than any other; for it is a varying affection, and I should say that cases happen much more frequently amongst males than females. I have met with cases amongst people at the middle period of life; but I do not recollect a case over fifty years of age. It does not follow that because a person becomes subject to it, that he should continue to be so. It may be long in disappearing; and time, more than drugs, is the curative agent.

Indigestion may be a coincidence, but I doubt whether it has any other connection. The two following cases are very typical, and the subjects were brothers:

E. G. was 19 years old when I saw him first, at the Bristol General Hospital in March, 1887. He was a compositor by trade, had plenty of muscular strength and a fairly florid complexion. He liked an active life, and thought his work was too confining. He complained

of a great deal of irritation of the skin. The slightest blow would be followed by a very distinct "whealing;" and if he used a towel, at all rough, to wipe his face, arms, or body, after washing, his skin would become very red. These symptoms have only come on during the last few months, and he thought they arose from his more sedentary occupation. He made no marked complaint of suffering from indigestion or any other ailment.

Having seen several cases of "factitious urticaria," I examined his skin, and made the following experiments: I took the smooth end of a penholder, and printed the word "Edward" on the lower scapular region, and then made a few plain crosses on his arms and shoulders. The following phenomena occurred: Almost immediately the letters and markings appeared as thin red lines; then the redness extended over the surrounding skin, forming a pink suffusion. In another minute or two the red lines of the letters began to turn pale, and gradually most distinct white wheals—the exact outlines of the letters and marks—rose up prominently above the now deeper suffused surface, and became so distinct and discrete that a blind person could have made them out as readily as raised type on a page. Next, the surrounding redness gradually became paler, until at last there were only the raised wheals left, and these slowly disappeared. A slight itching of the skin of the part was felt, and this was apparently the only subjective symptom.

The other brother, W. G., æt. 14, a clerk, had symptoms very much resembling his brother, but in addition had been liable for several years to attacks of epistaxis; and if he cut his finger, it bled very freely; and if he engaged in any game, such as football or cricket, where he was liable to be pushed or hit with a ball, the parts

affected would swell very quickly, and become very red—so much so that, although liking games very much, and being a fairly strong boy for his years, he was inclined to give them up.

With both of them the wheals were more easily produced in hot than in cold weather; and they would occur on any parts of the body or the extremities, except the palms, the soles, and the head. The explanation of the phenomena would appear to be this: First of all, the marking of the skin sets up an irritation, which is conveyed to the capillaries of the part through the vasomotor system; the capillaries dilate, causing the red lines to appear; then the adjoining surfaces participate in the action, and the suffusion spreads from the parts first irritated. Shortly, the capillaries first affected, begin to get paralysed, white distinct wheals appear, and serum is forced out. I think there can be no question about that, because the wheals pit distinctly upon pressure. The surrounding blood-vessels dilate more and more, and the redness deepens and increases. By-and-by, the capillaries begin to contract again, the suffusion gradually disappears, and, last of all, the serum of the wheals is re-absorbed.

I have seen many such cases. One man was engaged at a tobacco-factory, and he showed very marked symptoms.

I have treated these cases with tonics, astringents, mild aperients, arsenic, belladonna, bromides, ergot, and salicylate of soda, the extract of nux vomica, strychnia; or two or more of the remedies in combination. Some of them seem to exert very little curative action. Ergot gave the best results; but, at the best, drugs seem to be rather inoperative.

Cases of factitious urticaria should also be looked at from a medico-legal aspect, and the consideration is very important.

Take the case of the younger boy, W. G. Suppose a school-teacher gave him a few smart strokes with a cane on the back or arms. The appearance of the back, a short time afterwards, would be quite out of proportion to the severity of the punishment, and a very prejudiced opinion, so far as the master was concerned, might very readily be formed, and a charge of undue violence be very easily set up.

As an interesting sequel to the cases of the two brothers, I may state that since they were under my care, they have both entered the Navy, and have developed into two as fine and healthy-looking young fellows as could be met with, and the "urticarial" phenomena are very much diminished.

Reviews of Books.

A Treatise on Gout. By Sir DYCE DUCKWORTH, M.D. Edin., Physician to, and Lecturer on Clinical Medicine in, St. Bartholomew's Hospital, &c., &c. With Frontispiece and Illustrations. London: CHARLES GRIFFIN & Co. 1889.

After having done more than observe the advice which Horace gives to authors intending to publish, Sir Dyce Duckworth has at length conferred upon the profession the welcome boon of issuing his long-contemplated work on gout. Amid all the high-sounding phrases and the straining after scientific precision with which modern medicine abounds, it seems suggestive of Arcadian simplicity to read a book by an author of Sir D. Duckworth's eminence, in which are upheld the importance of treatment, the validity of the doctrine of diatheses, and superiority of English theories and practice to those of Germany or the United States. Explicitly professing himself not to be a specialist, and seeing gout therefore in its full relation to other diseases, Sir Dyce justly remarks that many years' experience of hospital and private practice in London has afforded him in this, the largest field for observation of gout in the world, such opportunities of acquiring an experience, which it is only right should be utilised for the benefit of the profession at large. This he has done with authority and success. We shall not subject our author to a detailed review, or even give an analysis of his work; everyone practising medicine must possess the book, which will take the place hitherto held by Sir A. Garrod's *Treatise*. We will content ourselves with one or two remarks only. On the subject of the pathogeny of gout, Sir Dyce is now much less dogmatic upon its owning a neurotic cause than some years ago he was in his article in *Brain*, when he considered that the portion of the nervous system implicated is situate in some part of the medulla oblongata;

assuming now the existence of a basic arthritic diathesis, gout, as well as rheumatism, he considers to be a neuro-humoral disease. Could not as much be said of all other dyscrasiæ? The section on treatment is full and most helpful, and will always be referred to with much advantage by the busy practitioner. The lines of familiar English modes of treatment are mainly advised, no allusion being made to the recommendations to treat gout on opposite principles of dietetics which have been lately advocated on the Continent. In support of his adherence to well-tried remedies and *régime*, our author quotes from *The Taming of the Shrew*, "Old fashions please me best; I am not so nice to change true rules for *new* inventions"; which, with the utmost deference for our learned and accomplished author, Bianca does not precisely say. The book is adorned with a few excellent illustrations, but if amongst our lively expression of gratitude to Sir Dyce we may find a fault, it would be to remark that to the various representations of microscopical sections there is nothing given by way of indicating the scale upon which they are drawn. This is but a needle in a bottle of hay, and will hardly be discovered; but your critic is nothing if not captious.

Lectures on Nervous Diseases. By AMBROSE L. RANNEY, A.M., M.D. Philadelphia: F. A. DAVIS. 1888.

Of the seven sections of which Dr. Ranney's handsome volume is composed, the first is on the anatomy and physiology of the cerebro-spinal axis, and is illustrated with numerous explanatory diagrams, which, if they *are* very diagrammatic and many also vividly coloured, are helpful to the quick and easy apprehension of the statements in the text; they serve also to show that Dr. Ranney's views on the localisation of function are not always identical with those commonly held in this country. Section two is devoted to the detailed instruction how to examine the nervous system of a patient and contains much useful information, never perhaps so conveniently collected together before. The third and fourth sections treat of the individual diseases of the brain and spinal cord fairly well; but inadequately in proportion to the other departments of the work. Section five will to neurologists in this country present most of novelty in its statements; it treats of "functional" nervous diseases, such as epilepsy, chorea, neurasthenia and migraine, and sets forth in a wonderful

manner the author's belief that most cases of these diseases are dependent upon anomalies of the ocular muscles and of eye-strain, a belief which is probably shared in its entirety with the author by no one besides Dr. G. T. Stevens, his preceptor in this faith. Nearly three years ago, the New York Neurological Society appointed a commission to investigate the relation between the ocular muscles and "functional" nervous diseases. The report of this commission has recently been presented to the Society, and is strongly adverse to Dr. G. T. Stevens' "treatment of ocular irritations as a therapeutic measure in certain neuroses." The last section, on Electricity in Medicine, consists very largely of a reproduction of his previously published work on that subject, which is here treated in considerable detail and minuteness. We presume Dr. Ranney finds electricity an agent of more remedial power than physicians on this side of the Atlantic habitually do. Static electricity he uses very extensively with elaborate apparatus and apparently with encouraging results.

If, upon the whole, we cannot recommend Dr. Ranney's book as a guide of unexceptionable trustworthiness to the beginner, there is very much in it of high value to the fairly-trained neurologist.

Handbook of Hospital Practice and Physical Diagnosis. By CHRISTOPHER J. NIXON, M.B., LL.D. Univ. Dublin, &c., &c., Senior Physician Mater Misericordiæ Hospital, &c., &c. London: J. & A. CHURCHILL. Dublin: FANNIN & CO. 1889.

Quite recently it has been stated that the clinical teaching in the Dublin hospitals is, or was defective, and that some foundation existed for this indictment seems proved by the fact that the combined Colleges of Physicians and Surgeons of Ireland have now instituted two separate examinations upon the subjects of Hospital Practice of the candidates for their licence. Dr. Nixon has prepared a manual to meet the requirements of students for a guide to physical diagnosis so far as medicine is concerned, a manual of very considerable value. A large part of the work is occupied by the sections pertaining to the examination of the thoracic viscera, the physical signs pertaining to the heart and its associated organs being treated in great detail. Most other topics,

however, are also fairly well discussed, such as the pulse, temperature, examination of the urine, fæces, and so forth, each explained with as much detail as a student can be expected to become conversant with. The nervous system and one or two other special subjects are not treated of in this work, remaining to be dealt with separately. The book is adorned with many illustrations borrowed from various sources, and disfigured by many misprints, some of which are comical and some positively misleading. The portions on the microscopical examination of sputum, urinary deposits, and such like, seem to lack authority and precision.

The Treatment of Uterine Tumours by Electricity. By THOMAS KEITH, M.D., LL.D., and SKENE KEITH, F.R.C.S. Pp. 255. Edinburgh: OLIVER & BOYD. 1889.

The title of this work is perhaps a little misleading. The author is concerned, not with uterine tumours generally, but only with myomata; and there is no disquisition on the subject. It is simply a plain unvarnished record of all cases (106 in number) of uterine fibroid treated by the authors according to Apostoli's method up to the date of publication.

This is the first really serious attempt to place before English readers a number of cases treated by thoroughly competent men by means of electricity, and sufficiently large to draw conclusions from. As to the cases themselves, they are evidently recorded with scrupulous honesty; good, bad, and indifferent results being related with equal impartiality; and, in many instances, the patient herself or her medical man being made the mouthpiece. Of the truthfulness of the records there is no doubt. What do we think of the results?

There is but one word to express our feeling—disappointment. We can scarcely ignore the conclusion that, even at the hands of the most skilful men we possess, Apostoli's treatment is tedious, uncertain, and inconclusive; likely to be seen at its best only among the rich and idle of our patients, and not without some risk. That it is tedious, almost beyond tolerance in many cases, there is no gainsaying. That it is uncertain, these records fully prove. And that it is inconclusive is partly shown by recrudescence of symptoms in

several cases, and a probable or certain continuance of the tumour in most of those greatly improved.

In all humility, speaking particularly of one who holds deservedly such a pre-eminent position as a man and a surgeon, we cannot admit that, in respect of results attained by electricity, he has made out a certain case of "Surgical hands off." With others, we believe that the full capabilities of the electrical treatment might with safety have been left in non-surgical hands, and that there will always remain cases for which surgical operation will be required. For such cases we want skilled surgeons; and it is a matter of regret to many of us that the capacities of such a man as Keith, unequalled in this domain, should be lost to us. Admitting, as we all do, that the great majority of cases require no treatment; believing, as we must, that some cases are benefitted or even cured by Apostoli's treatment, we maintain that there still remains a small minority which, if surgical interference is ever justifiable as a means of removing suffering, to say nothing of saving life, must be dealt with by surgical removal. And this view is strengthened by a careful study of the work before us.

The Student's Surgery. By FREDERICK JAMES GANT, F.R.C.S. Pp. 817. London: BAILLIÈRE & Co. 1890.

"Still another Student's Surgery!" we grumble as we open this rather striking little work; and we proceed to grumble generally about the superficiality of the age we live in, the tendency to skim the surface instead of digging the depths, and we make specific applications. Surgery grows and grows; and surgical "students'" books get smaller and smaller. Instead of trying to educate our men up to the requirements of their art, we bring our art down to their capacities. We want to recruit students from among university graduates, and we give them pabulum suited for boys leaving dames' schools! That is our grumbling, however.

This book is not so bad as that. Small print, broad pages, and thin paper make up a volume that contains a good deal, if it is not bulky. And of the matter: well, we may honestly say that the compounding of it must have

represented an immense amount of labour—which labour, we fear we must add, would have been, to the detriment neither of the matter nor the author, far better divided. There is no man alive—and there never will live another man—who, alone and unaided, will present the best possible compendium of surgery. It must be divided up. On several subjects with which we are specially familiar, it would be easy to point out shortcomings; but we feel it would be ungracious to do so. As a total individual effort the work represents a wide knowledge, great industry, and much judgment; but as a text-book for students we cannot recommend it.

The get-up of the book is good—with the exception of the illustrations. Granting that the illustrations may be mutilated reproductions of antiquated engravings, admitting that the artist engaged for a medical work may be ignorant of most of the elementary principles of art, we still feel we must rebel against the necessity of a man who has a fracture of the neck of the femur having also a squint (p. 303). And on the opposite page there is a drawing of a femur (signed "Author") which is worthy of study, for it is an extraordinary bone. In Fig. 143, the size of an organ along which a man is passing a sound is, by measurement, equal to that of the wrist of the surgeon who is officiating. All through, the illustrations are as bad as we have ever seen in a surgical work—and that is saying a good deal!

Diseases of the Rectum and Anus. Second Edition. By Harrison Cripps, F.R.C.S. Pp. 500. London: J. & A. Churchill. 1890.

We have formed a very high opinion of this work. Based on the double foundation of abundant clinical experience and extended pathological study, the work is, at the same time, the production of a skilful and judicious surgeon. The inclusion of several valuable monographs, the extension and re-writing of several parts, and the introduction of a comparatively novel method of performing inguinal colotomy, bring the work fully abreast with the latest improved doctrines and practices.

The work is essentially personal: the author records his own work and beliefs. Holding as strongly as he does the

view (which we to a great extent share) that colotomy by abdominal section is superior to lumbar colotomy, it still strikes us as peculiar that a work dealing with diseases of the rectum and anus has not a word of description to give to the latter operation. The author has certainly the courage to act upon his opinions. We should have liked, too, to have seen some notice taken of certain modifications of the abdominal operation employed by good surgeons, and which we believe would have added to the excellence of the author's. A surgical operation rarely springs forth perfect from the brain of one man. He is a wise inventor who keeps up a full knowledge and appreciation of all other patents bearing on his subject. "Love is blind" in more than one direction; the adage may certainly be applied surgically and mechanically.

Leprosy and its Prevention. By ROBSON ROOSE, M.D., LL.D. Pp. 100. London: H. K. LEWIS. 1890.

The title of this work is more pretentious than its contents. Only under very exceptional circumstances could "several visits to Norway" justify a physician, with no other opportunities for clinical study, in writing a book on "Leprosy and its Prevention;" these circumstances are not very evident in this case, and the result is as might be expected. Very few men in England are competent to write or to review a work on Leprosy; and neither the author of this work nor his critic is among the number.

A Handbook of Surgical Pathology. Second Edition. By W. J. WALSHAM, M.B., F.R.C.S.; assisted by D'ARCY POWER, M.A., M.B., F.R.C.S. Pp. 634. London: BAILLIÈRE & CO. 1890.

We have only good to say of this work. It is a practical embodiment of the best of all possible plans of teaching—the objective. It is an exposition of surgical pathological principles as illustrated by pathological specimens available to students in the St. Bartholomew's Hospital Museum. There

is only one cause for regret; and that is, that the museum is not complete. The remark appended to so many descriptions, "No specimen in the museum," makes us long for such a work based on the Hunterian collection, or one which by mutual exchanges and selections could be made even more perfect than that.

Chronic Bronchitis and its Treatment. By WILLIAM MURRELL, M.D., F.R.C.P. London: H. K. LEWIS. 1889.

To the practitioner, oft perplexed in the treatment of this obstinate complaint, this small volume will prove a boon. Here are full and pleasant records of the value of a large variety of therapeutic methods, including those by medicine, spray, and inhalation, and all from the point of view of an extensive clinical experience.

Food in Health and Disease. By I. BURNEY YEO, M.D., F.R.C.P. London: CASSELL & Co., LIMITED. 1889.

Cassell's series of Clinical Manuals would not have been complete without a work dealing with this subject; and if this volume does not add much to the information given by existing treatises, yet it is much to be commended for the excellent arrangement of its contents, which, under the two main heads of the title, are subdivided into all necessary detail. It seems inevitable that writers on Food should consider the human stomach to be a kind of retort in which chemical changes go on with unerring accuracy; and so Dr. Yeo, in the first part of his book, gives plenty of analytical tables to guide in the preparation of a normal dietary. Without these it seems almost a marvel that instinct should ever have led healthy men to choose food that in fit proportions would properly nourish them. The second and smaller part of Dr. Yeo's book, dealing with Food in Disease, is of principal value; and here, with the exception of an overestimate of the food-value of beef-tea and its allies, will be found much that is helpful to the practical medical man.

This book is turned out in the flimsy and shabby way which Messrs. Cassell and Company seem to think good enough for their medical publications.

Studies in Clinical Medicine. By BYROM BRAMWELL, M.D., F.R.C.P. Ed., F.R.S.E. Nos. 1—18. Edinburgh: YOUNG J. PENTLAND. 1889-90.

This periodical, a record of some of the work done at Dr. Byrom Bramwell's Clinic in the Edinburgh Royal Infirmary, is issued fortnightly during the summer and winter sessions. It is a praiseworthy attempt by a physician eminently qualified for the task to preserve the best of the very useful work of an out-patient department. The cases are frequently well illustrated, and are recorded in Dr. Bramwell's well-known lucid style. The conversations in the Clinic are often given *verbatim*, and show the Scotch out-patient to be a far more pleasant person to deal with than his southern counterpart; for, without circumlocution, he gives just the answers his doctor requires, and in the fewest possible words.

Like Mr. Pentland's publications generally, this work is issued in an attractive form.

American Resorts, with Notes upon their Climate. By BUSHROD W. JAMES, A.M., M.D. Pp. 285. Philadelphia and London: F. A. DAVIS. 1889.

This is a well-got-up and thoroughly practical work on American Health-resorts, in which is included a translation of Werkof's work on *Climatology*, so far as it relates to America and contiguous islands. That America has, within its own limits, an almost endless variety of climate suitable for invalids is an admitted and well-known fact. This work will serve as an excellent guide to the selection of a resort for health.

Thousands of English readers are familiar with American authors in magazines, novels, poems and philosophy. The American *can* write clear and pure English; that is abun-

dantly evident. The medical American writer does not always do so; in this case he does not. "Locate" and "Location," for instance, occur on almost every page: these words are not employed by cultured writers of English.

The Year-book of Treatment. (CASSELL & Co., London.)
The Medical Annual. (WRIGHT & Co., Bristol.)
Braithwaite's Retrospect of Medicine.

These admirable compendiums come to hand with fair punctuality. *The Medical Annual* maintains its excellence as an impersonal and trustworthy record of scientific and therapeutic progress. Cassell's *Year-book*, full and complete and thorough and highly scientific as it is, continues to be here and there disfigured by personal opinions and comments of the abstractors, which we could always dispense with and would often contradict. *Braithwaite* is such an old and valued and trustworthy friend, that his welcome may be taken for granted.

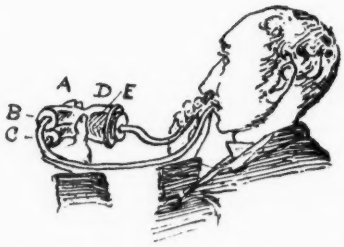
The Diseases of Children. By HENRY ASHBY, M.D., M.R.C.P., and G. A. WRIGHT, B.A., M.B., F.R.C.S. Pp. 681. London: LONGMANS, GREEN & Co. 1889.

We have carefully and leisurely perused this book, comparing it with others on the same subject, and have come to the conclusion that it is the best work of moderate size at present in existence which can be placed in the hands of the English reader. The authors are evidently scientific men of a high order: their opportunities for clinical experience have been exceptionally great; they have, to the full, utilised their opportunities, and they have presented their experience and their knowledge in a simple, clear and straightforward manner, which commands at once credence and respect.

Notes on Preparations for the Sick.

A New Instrument for Ammonium Chloride and other Vapours.

Dr. Fred. A. A. Smith, Hon. Surgeon Cheltenham Eye, Ear, and Throat Infirmary, sends us the following note: "In all the inhalers with which I am acquainted, the fumes are generated by drawing them through the mouth and exhaling them through the nose. For the fumes to reach the middle ear, the easiest method in most cases is by Valsalva's plan. The above instrument acts perfectly; all that is necessary being to insert the nasal rubber end into one nostril, and gently blow through the mouthpiece. The fumes will then be generated, and enter the one nostril and return by the other. For the fumes to enter perfectly into the Eustachian tubes and middle ear, the patient must be told to intermittently close the open nostril, when the fumes will be felt in the middle ear. By taking away the ammonium chloride sponges, any other vapours may equally well be used by dropping the medicines on the sponge in enlarged part D. The air inhaled, coming from the warm lung, is far preferable to the cold external atmosphere. If instead of the rubber nose end, one be made to fit the Eustachian catheter, the fumes can easily be made to enter the Eustachian tubes where catheterism is deemed necessary. Messrs. Mayer and Meltzer, 71 Great Portland Street, London, W., have made the above entirely to my satisfaction, and can supply the same."



Morrhuol Chapoteaut. Vin de Chapoteaut. Dialysed Pepsine, in pearls. Santal-midy, in capsules. Valerianic Ether, in capsules. Joy's Asthma Cigarettes. Dessicated Malt Extract.—WILCOX & Co., London.

These have been forwarded to us by Messrs. Wilcox and Co, as samples of some of the new remedies prepared by Messrs. Rigaud and Chapoteaut, of Paris. They appear to be elegant and useful preparations, carefully prepared, and reliable.

We have found that patients who cannot take or digest cod liver oil in other forms, can swallow the **Morrhuol Pills**, and gain weight in consequence.

The **Wine** is a liquid peptone, containing the pure peptone of ten grammes of beef in each wineglassful.

The **Asthma Cigarettes** are too well known to need any description or commendation.

The advantages of the **Desiccated Malt Extract** are: first, its richness in diastase, through being prepared *in vacuo* at a temperature of 100° Fahrenheit; and, secondly, the impossibility of its fermenting, owing to being in a powder; whereas with the semi-fluid extracts the merest trace of fermentation (and they are seldom free from such) will not only destroy the diastasic properties, but frequently cause diarrhœa, &c. This powder is also far more convenient to take, as it may be either eaten between bread and butter, or dissolved in a liquid.

Peptone of Meat. Peptonate of Iron. DENAEYER'S PEPTONES COMPANY, London.

This **Peptone of Meat** is a fluid, slightly gelatinous at low temperatures, clear, pale yellow, with an agreeable aroma and a pleasant flavour similar to that of strong beef-tea. It has a specific gravity of 1070 at 15° Cent. The total weight of ash is 3.460 per cent.; that of the solids when dried is 16.96 per cent. It contains no albumen; but the nitrogenous substances, albuminose, peptone, and other extractives amount to 71 per cent. of the dried residue. It is completely sterilised, and keeps fairly well even after the cork has been removed.

Its appearance, flavour, and permanence are superior to any other of the numerous peptones we have examined; patients take it without protest, and ask for more.

We have found that it dialyses readily, and does not contain any deleterious preservative agent; it should therefore be of great utility in all disorders where the gastric and pancreatic digestive powers are deficient.

The **Peptonate of Iron** has a density of 1040 at 15° C., and contains in 100 parts—

Pure peptone	6.80
Hydrated oxide of iron	3.00

It is believed to be a definite chemical combination in which the iron is contained in a form eminently suited to the irritable condition of the gastro-intestinal tract in many anæmic dyspeptics. It may also be used for hypodermic injection, when this method is requisite. Theoretically, it should be easy to produce hæmoglobin from such nutriment as this; and probably a preparation of this kind is fully equal to hæmoglobin itself given as medicine.

We have always found it difficult to induce patients to swallow the various preparations of which hæmoglobin is the principal constituent; but this fluid is quite pleasant in appearance and flavour, and patients take it without difficulty. Its hæmatinic value must be comparatively feeble, as is that of hæmoglobin and of dialysed iron: many other preparations of iron cure anæmia much more quickly; but in chronic cases where the digestive power is weak, and where other preparations of iron do not agree, such a compound as this should be of great clinical value.

Liq. Podophyllin et Belladonna c̄ Strychnia. Liq. Podophyllin et Pepsin.—Hockin, Wilson & Co., London.

These preparations are additions to the Liq. Podophyllin (Hockin) previously mentioned by us in Vol. VI. We there directed attention to the fact that this solution of podophyllin has little or no aperient action, and therefore is likely to be useful when the cholagogue action of the drug is needed and an aperient is not desirable. The addition of belladonna and strychnia in the one fluid must materially increase its activity, and the combination with pepsine ought to be of great value to the bilious dyspeptic. Both fluids should be of considerable utility in many cases of atonic dyspepsia: they are not disagreeable, and are freely miscible with water. We

consider them to be a useful addition to the numerous agencies in common use for the treatment of a class of conditions needing a great variety of drugs and varied preparations of the same.

Gelatine-Coated Oval Pills.—WYLEYS & Co., Coventry.

These pills are a great improvement on the older methods of pill-making. They are equal in appearance to any we have seen, and the oval shape is similar to that we have been familiar with as the "McK. and R. Pills."

It would be a great advantage to pill-takers if such pills as these could always be obtained without delay: no one will endure the soft powdered pills as they are still commonly dispensed after having once taken a modern gelatine-coated pill either round or oval.

The Tenth International Medical Congress.

In accordance with the decision of the Ninth Congress at Washington, the Tenth International Medical Congress will be held at Berlin from the 4th to the 9th of August, 1890.

By the delegates of the German Medical Faculties and the chief Medical Societies of the German Empire, the undersigned have been appointed members of the General Committee of Organisation. A Special Committee of Organisation has also been appointed for each of the different sections, to arrange the scientific problems to be discussed at the meetings of the respective sections. An International Medical and Scientific Exhibition will also be held by the Congress.

We have the honour to inform you of the above decisions, and at the same time cordially to invite your attendance at the Congress. We should esteem it a favour if you would kindly extend this invitation to your friends in medical circles as way may offer.—Dr. RUDOLF VIRCHOW, President; Dr. VON BERGMANN, Dr. LEYDEN, Dr. WALDEYER, Vice-Presidents; Dr. LASSAR, Secretary-General.

Regulations and Programme.

I. The Tenth International Medical Congress will be opened in Berlin on Monday, August 4th, 1890, and will be closed on Saturday, August 9th.

II. The Congress shall consist of legally-qualified medical men who have inscribed themselves as members, and have paid for their card of membership. Other men of science who interest themselves in the work of the Congress may be admitted as extraordinary members.

Those who take part in the Congress shall pay a subscription of twenty marks (one pound stg. or $ 5) on being enrolled as members. For this sum they shall receive a copy of the Transactions, as soon as they appear. The enrolment shall take place at the beginning of the Congress. Gentlemen may, however, be enrolled as members by sending the amount of the subscription to the treasurer,* with their name, professional status, and residence appended.

III. The object of the Congress is an exclusively scientific one.

IV. The work of the Congress will be discharged by eighteen different sections.† The members shall declare upon enrolment to which section or sections they intend more particularly to attach themselves.

V. The Committee of Organisation shall, at the opening sitting of the Congress, suggest the election of a definite Committee (or Bureau), which shall consist of a President, three Vice-Presidents, and of a number—as yet undetermined —of Honorary Presidents and Secretaries.

At the first meeting of each section, a President and certain number of Hon. Presidents shall be elected; these

* Treasurer's address: Dr. M. BARTELS, Berlin, S.W., Leipzigerstrasse 75. Please to enclose a visiting-card.

† *SPECIAL SECTIONS.*

1. ANATOMY.
2. PHYSIOLOGY AND PHYSIOLOGICAL CHEMISTRY.
3. GENERAL PATHOLOGY AND PATHOLOGICAL ANATOMY.
4. PHARMACOLOGY.
5. INTERNAL MEDICINE.
6. DISEASES OF CHILDREN.
7. SURGERY.
8. OBSTETRICS & GYNÆCOLOGY.
9. NEUROLOGY & PSYCHIATRY.
10. OPHTHALMOLOGY.
11. OTOLOGY.
12. LARYNGOLOGY & RHINOLOGY.
13. DERMATOLOGY AND SYPHILIGRAPHY.
14. DISEASES OF THE TEETH.
15. HYGIENE.
16. MEDICAL GEOGRAPHY AND CLIMATOLOGY (HISTORY AND STATISTICS).
17. STATE MEDICINE.
18. MILITARY HYGIENE.

latter shall conduct the business of the sections in turn with the Presidents.

On account of the different languages employed, a suitable number of secretaries shall be chosen from among the foreign members. The duties of the foreign secretaries shall be confined to the sittings of the Congress.

After the termination of the Congress, the editing of the Transactions shall be carried out by a committee, specially appointed for this purpose.

VI. The Congress will assemble daily, either for a general meeting or for the labours of the different sections.

The general meetings will be held between eleven and two o'clock. Three such meetings will take place.

The time for the sittings of the various sections will be fixed by the Special Committee of each section, it being understood, however, that no such sittings are to take place during the hours allotted to the general meetings.

Joint sittings of two or more sections may be held, provided that the Bureau of the Congress can offer suitable rooms for such sittings.

VII. The general meetings shall be devoted to

(*a*) Transactions connected with the work and general management of the Congress.

(*b*) Speeches and communications of general interest.

VIII. Addresses in the general sittings, as well as in any extraordinary meetings which may be determined upon, can only be given by those who have been specially requested by the Committee of Organisation.

Proposals relative to the future management of the Congress must be announced to the Committee of Organisation before July 1st, 1890. The committee shall decide whether these proposals are suitable to be introduced for discussion.

IX. In the sittings of the sections, questions and problems will be discussed, which have been agreed upon by the special Committees of Organisation. The communications of those appointed by the committee to report on a subject shall form the basis of discussion. As far as time allows, other communications or proposals, proceeding from members and sanctioned by the Committee of Organisation, may also be introduced for discussion. The Bureau of each section decides as to the acceptance of such offered communications, and as to the order in which they shall come before the meeting, always provided that this point has not been already determined in the sitting itself by a decree of the section.

Scientific questions shall not be put to the vote.

X. Introductory addresses in the sections must, as a rule, not exceed *twenty minutes in length*. In the discussions no more than *ten minutes* are allowed to each speaker.

XI. All addresses and papers in the general and sectional meetings must be handed over to the secretaries, in writing, before the end of the sitting. The Editorial Committee shall decide whether, and to what extent, the written contributions shall be included in the printed Transactions of the Congress. The members who have taken part in the discussions will be requested to hand over to the secretaries before the end of the day, in writing, the substance of their remarks.

XII. The official languages of all the sittings shall be German, English, and French. The regulations, the programme, and the agenda for the day will be printed in all three languages.

It will, however, be allowable to make use of other languages than the above for brief remarks, always provided that one of the members present is ready to translate the gist of such remarks into one of the official languages.

XIII. The acting-president shall conduct the business of each meeting according to the parliamentary rules generally accepted in deliberative assemblies.

XIV. Medical students and other persons, ladies and gentlemen, who are not physicians, but who take a special interest in the work of a particular sitting, may be invited by the President, or be allowed to attend the sitting by special permission.

XV. Communications or enquiries regarding the business of separate sections must be addressed to the managing members thereof. All other communications and enquiries must be directed to the General Secretary, Dr. LASSAR, Berlin, N.W., 19 Karlstrasse.

In connection with the Congress, there will be an International Medico-Scientific Exhibition. We therefore cordially invite all who may wish to exhibit or participate in the above exhibition. All exhibits, however, to be of a scientific nature.

The exhibits expected will be as follows:

1. New or improved scientific instruments for biological and special medical purposes, including apparatus for photography and spectral analysis pertaining to medicine.
2. New pharmacological chemical substances and preparations.

3. New pharmaceutical substances and preparations.
4. New food preparations.
5. New or improved instruments for internal and external medicine and allied specialities, including electrotherapy.
6. Plans and models (new) of hospitals; houses for reconvalescents, disinfection, and general bath-houses.
7. New appliances, such as pertain to nursing the sick, including the methods of transportation, and baths for the sick.
8. Apparatus (new) for hygienic purposes.

For applications for exhibits, and information, please address Dr. O. LASSAR, Secretary-General, Bureau of the Tenth International Medical Congress, Berlin, N.W., Carl-strasse, No. 19.

Please designate all mail matter relating to the exhibition "Exhibition Affairs," and also enclose a visiting-card or card of the firm, on which the name and residence is plainly written or printed.

The Bureau is open for the present from five to seven p.m.

PERISCOPE.

MEDICINE.

Tetany after Extirpation of the Thyroid.—Eiselberg, at the recent Congress held at Heidelberg, brought forward some statistics to show the frequency with which tetany occurred after the extirpations of the thyroid carried out by Billroth. The operation was performed in fifty-two cases, and of these twelve were affected by this disorder, usually after some prodromal symptoms. Two were but slight, while six were moderately severe. In a woman, nine years after extirpation, frequent attacks occurred. She always suffered from bronchial catarrh, with tough expectoration; but the mental condition was normal. Four of the cases were fatal—one after four weeks, a second after seven months. In every case the thyroid was excised for a goitre, which caused difficulty of respiration, two of them being cancerous. All were in females between the ages of twelve and sixty-four; but this is to be considered merely a coincidence. Morphia and chloral relieved the slight cases, severe ones not being at all influenced. As a prophylactic, total extirpation of the gland should be avoided where possible. From experiments in cats, simple complete excision is always followed by tetany and death in seven to forty days; unilateral extirpation (in sixteen instances) did not show tetany as a result. On eight occasions the gland was removed in two portions at different times; one half was cut out and transplanted into a fold of the omentum. After three days to three weeks, the other half was excised, when all the animals died, with the exception of one, in which the transplanted piece of gland had become organised in the omentum. Eiselberg believes the function of the gland to be, that it renders innocuous a mucinoid substance in the body which occasions a form of poisoning. Thus, Wagner, by injecting mucin from the salivary glands of oxen into healthy cats, produced tetany; and the reason why so many people escape this affection after extirpation of the thyroid is, that there are usually accessory glands having a similar function.—*Berliner klinische Wochenschrift*, No. 43, 1889. D. R. P.

Angina from Affection of Vagus. — Professor Obolensky relates a case which may be looked upon as an illustration of the above. An officer, aged forty-two, complained of pain in the sternal region, palpitation and breathlessness. In severe attacks the pain extended into the upper extremities and intercostal region, and was induced often on exertion even such as kneeling. Sometimes an attack seized him in sleep, and he was obliged to spring out of bed, with pain and dyspnœa. At other times the drinking of tea, or the mere process of eating, led to one. They usually lasted five to ten minutes; in some cases half an hour. They had begun first of all four months before and one month after a severe shaking, received in a railway-collision, from which, however, he had fully recovered. An examination of the chest yielded nothing. In an attack which came on as soon as he moved a few steps, the respiration rose from 24 to 36, and the pulse from 72 to 100. The cervical portion of the left pneumogastric was tender on pressure. The previous history showed that at nineteen the patient suffered from a paralytic affection, which was cured by iodide of potassium, and three years after he was again threatened by the same trouble, which yielded to similar treatment. He suffered from pains in the lower extremities; and his father had formerly been the subject of ulceration in various parts, more especially of the mouth. All these facts supported the view that one had to deal with a syphilitic process. Iodide of potassium was accordingly given, and within a month the patient was discharged well.—*Berliner klinische Wochenschrift*, No. 52, 1889. D. R. P.

Epistaxis Premonitory of Interstitial Nephritis. —Gaucher insists on the necessity of examining the urine of all patients liable to frequent attacks of epistaxis, as we shall find in some of the cases that we have to do with kidney-mischief.—*Revue de Laryngologie*, May 1st, 1889. B. J. B.

The next four abstracts are translated from the *Deutsche Medizinal-Zeitung* and *Allgemeine medicinische Central-Zeitung:*

The Infectious Nature of Fibrinous Pneumonia.— G. Lipari (*Centralblatt f. klinische Medicin*, No. 50, 1889) confirms our previous knowledge of Fränkel's pneumococcus, and shows experimentally the influence of cold as a cause of fibrinous pneumonia. The endo-tracheal injection of pneumonic sputum, or of pleural exudation from an animal dead

of pneumonia, gave a negative result; for out of eleven guinea-pigs and rabbits only two died, one only having foci of consolidation. Quite different results followed when the animals, either before or after the injection, were made warm by exercise, and then placed for ten or twenty minutes in a bath of 3° Cent., or had ether applied to the shaven chest. Out of five guinea-pigs and three rabbits treated thus, three of the former and all the latter died with true pneumonic infiltration. The author considers that cold causes a paralysis of the ciliated epithelium of the bronchi, and by congestion a swelling of the mucous membrane, and that through these two factors the infective material sinks into the alveoli. This explains the effect of cold in the production of pneumonia in man, though numerous pneumococci are present in the human mouth during health. G. P.

Actinomycosis.—According to Ernest Partsch (*Volkmann's Sammlung*, 306-7), the human body shows the purest form of actinomycosis infection, and is affected only through the production of a granulation tissue which is marked by softness, a tendency to bleeding and to fatty degeneration. The accompanying suppuration is brought about, not by the fungus, but by the introduction of the coccus pyogenes at the same time. The parasite spreads from the original focus, forming indurations which develop into tumours, and is stopped neither by fasciæ nor bones. It never propagates itself by the lymph-channels, but by destruction of the vessel-walls easily reaches the inner organs through the blood-stream.

The swelling of the lymph-glands is of a purely inflammatory nature. Actinomycosis, as such, causes no lymph-gland metastases. It differs in this from syphilis and tuberculosis. It does not tend to a dyscrasis. It is at first a purely local affection, and its extension depends on the entrance of the poison into the blood-channels. It is not hereditary, and is to be placed among chronic infective diseases. Its product is an infective granulation tumour. As in animals, infection occurs through the food and inspired air. Communication from beasts to men is not yet proved. The fungus lives as a parasite on grain, and fastens on the teeth or tonsils or enters the lungs. From the mucous membranes it enters the body cavities, and occasionally it may enter through a wound. As to the treatment, favourable results have been obtained where thorough surgical extirpation has been possible. G. P.

On the Influence of Human Gastric-juice on Pathogenic Germs.—Kurlow and Wagner (*St. Petersburger medicinische Wochenschrift*, No. 42, 1889) describe certain experiments made by themselves, and come to the following conclusions:

(1) Certain microbes which are wont to live in the stomachs of healthy persons are not affected, but those which enter with the food and saliva are not in a position to continue their existence in normally acid stomachs.

(2) The gastric juice is a very powerful destroyer of pathogenic germs.

(3) When it acts normally its destructive power is only escaped by microbes with strongly resisting spores, such as the tubercle and anthrax bacilli, and sometimes staphylococci. Those which have not such spores die in less than half an hour in normal gastric juice. Such are those of typhoid, cholera, tetanus, and B. pyocyaneus. A similar destructive power is found in the intestines, as is shown by certain failures in inoculation with the cholera bacillus; but on this further researches are being made. G. P.

The Influence of Ventilation on Organisms Suspended in the Air.—Ric. Stein, in the Hygienic Institute at Breslau, has made certain investigations on this point, which have led to remarkable results. In quiet air in a chamber the particles containing bacteria fall to the ground. The air will in one or two hours be completely free of germs. If the floor be then washed with an antiseptic solution, and the furniture and similar articles wiped with a cloth wrung out in it, the chamber can be considered as disinfected.

Ventilation, which consists in the renewal four times an hour of the air contained in a chamber, has no special influence on the removal of germs floating in the air. Only in a strong draught is a quick and complete removal of germs from the air to be obtained.

The use of a spray appeared to have no effect in purifying the air. Even under strong draught, neither the floor, carpets, nor furniture were purified. The practice of hanging up infected clothes and bedding in the air is useless, unless they are at the same time beaten and brushed, an operation dangerous to the workmen and neighbourhood.—*Allgemeine medicinische Central-Zeitung*, No. 4, 1890. G. P.

THERAPEUTICS.

Recent Treatment of Pulmonary Tuberculosis.—Dr. Paul Chiron gives a *resumé* of the various new medications advocated for pulmonary phthisis, and the results obtained:

I. Medicated Inhalations.—Inhalations of carbonic acid, according to Nothnagel and Nosbach, do harm; those of benzoate of soda are useless. The results obtained by inhalations of iodoform and of terebene are contradictory. Sulphurous acid has been tried by Dujardin-Beaumetz, with benefit as regards cough and expectoration.

Fluorhydric acid inhalations have been more extensively employed. M. Raimondi treated 128 patients, of whom twenty-eight were cured (disappearance of bacilli), eighteen improved, and five died.

Gœger obtained, on the whole, favourable results in seventeen cases treated. He found, however, that in twelve patients who gained weight, this gain bore no constant relation to amelioration of the local changes. When there is tubercular laryngitis, feeble solutions must be used, and the inhalations be few and far between on account of the risk of exciting inflammatory changes.

Andollent considered that the inhalations had more effect on the general state than on the local lung-lesions.

Dr. Burnet has not obtained very encouraging results from inhalations of fluorhydric acid; beyond improved appetite, he noted no positive benefit from the treatment, and in some patients it appeared to provoke diarrhœa.

Dr. Tisnè found there was improvement at first; but this was not maintained.

Gilbert has studied the effects on thirty patients, and thinks that fluorhydric acid is the best of the new medications. He found, however, that the bacilli never disappeared from the sputum, and that the physical signs underwent little change. These inhalations are contra-indicated in asthma and even in emphysema, and should be suspended if hæmoptysis occurs.

These different observations show that the number of cures is not greater from the employment of fluorhydric acid than it is from ordinary methods of treatment. The one constant result is, the rapid improvement of appetite: the importance of this is not to be undervalued in phthisis; but further experience has not confirmed the early enthusiastic reports as to the number of cures effected.

The method of Bergeron, of gaseous rectal injections, seems

in certain cases to improve the general well-being and appetite; but, as this can be obtained by less troublesome and disagreeable methods of treatment, it has fallen into disuse.

Subcutaneous Injections.—Gilbert injected eucalyptol subcutaneously, with no advantage to the patients: the injections gave rise to considerable pain, and in one patient a small fluctuating swelling remained at the site of injection; and, on incising this six weeks afterwards, he drew out a fluid similar to that injected, and of about the same quantity.

Dr. Shingleton Smith has employed injections of camphorated phenol, with some success.

Intrapulmonary Injections have been almost given up, even by the promoters of this form of treatment: no advantage, not to be obtained by other less dangerous methods of treatment, has been gained from their employment. Meanwhile, M. Fernet has in four patients injected a solution of camphorated naphthol β, with improvement in the physical signs in three of them.

Internal Remedies.—Dochmann and Mastell have used calomel, with, as a constant result, diminution of fever, night-sweats, cough, and cessation of diarrhœa.

Sticker employs iodide of potassium in cases of fibroid phthisis, and those in whom there is emphysema. Where the bronchial mucous membrane is especially affected, iodide should not be given, but creasote and the balsams employed. Contra-indications to the use of iodide of potassium he finds in hæmoptysis, laryngeal lesions, and œdema of glottis; interstitial nephritis or amyloid disease of kidney; iodism, purpura, pemphigus, and cardiac weakness.

Laskoff claims that he has cured ninety out of 112 tuberculous patients by administering an infusion of homeriana, a polygonaceous plant growing wild in Russia.

As to super-alimentation, in spite of the undoubted benefit derived from it in certain cases, it has not come into general use. Most patients find it difficult to continue to swallow for any length of time the enormous doses of meat-powder required: some of these powders are the reverse of palatable either in taste or odour. By choosing, however, the best kinds and substituting other foods for them when the patient has recovered a little appetite, good results may often be obtained.

Since the publication of Weigert's observations, inhalations of hot air have been largely used. The patient inspires

air heated at first to 100° C.; after two or three days, to 150° C. The hot air is inhaled at first for half an hour twice daily, increasing the period to two hours twice a day, or even to six hours daily. The patient must breathe deeply; and should remain quiet for half an hour after each *sèance*. The therapeutic effects are: increased strength; diminution of dulness and of râles; diminution in number, or even disappearance, of bacilli. Expectoration is increased at first; afterwards diminishes. The treatment is contra-indicated when there is hæmoptysis, or very profuse expectoration, with fever and loss of weight. The inhalations are useless in advanced phthisis complicated with syphilis, albuminuria, or intestinal ulcerations.

Finally, as to symptomatic treatment, iodoform is useful in hæmoptysis; antifebrin is perhaps the best antipyretic; and sulphonal has been employed with success in night-sweats.—*L'Union médicale*, Aug. 27th, 29th; Sep. 3rd, 1889.

J. M. C.

Creasote in Pulmonary Phthisis.—It is found that the presence of creasote in culture-fluids, in the proportion of .8 in 1,000 parts prevents, and in the proportion of .06 in 1,000 retards, the development of the tubercle-bacillus. Bouchard has determined by experiment that fifteen grammes of creasote in the day is a lethal dose for a man of sixty kilogrammes weight; while in practice a daily dose of more than three grammes—forty-five grains—is never necessary. According to him, the *rationale* of the use of creasote in phthisis lies in the following figures: .06 in 1,000 of creasote in nutritive media prevents the development of the bacillus; while to kill an animal by intravenous injection, it must be present in the proportion of .17 in 1,000 of the body-weight. Theoretically, then, it ought to be possible to attack the bacillus by a quantity of creasote which, while it restrains the activity and development of the microbe, is only the third part of the dose poisonous to the patient. M. Bouchard gives a daily dose of twelve to fifteen grains. For small doses he gives a pill which contains 1½ grains creasote, every two hours, to the number of eight or ten in the day; for larger doses he administers the creasote in solution in cod-liver oil, each tablespoonful containing a little more than 11½ grains. One or two spoonfuls are taken night and morning. It is necessary to be very careful not to cause irritation of the stomach.

Subcutaneous injections of the oily solution, which are a little painful, are employed by M. Gimbert; he and M.

Tapret also employ methods, by which the atmosphere in which the patient lives is charged with creasote. The results obtained seem not to be better than when it is given by the mouth. Bouchard claims that within eight to fifteen days expectoration, cough, and fever diminish, appetite and strength improve, and night-sweats cease. The patients gain in weight and the physical signs improve. In thirty-five per cent. of patients there was improvement; in twenty per cent. of cases in the first and second stages the symptoms, both local and general, disappeared. Unfortunately several of the cases afterwards relapsed.

Many other authors report encouraging results. Relying on his own and Lesguillon's observations, Mignon (*thése de Paris*) states that creasote has a local antiseptic rather than an anti-bacillary action, and thus hinders the fermentative processes which so often give rise to fever in the phthisical.

Stachiewicz has employed intra-pulmonary injections: these injections are useful when they destroy the diseased tissues, and thus limit the morbid process. His conclusions are, that if only one lung is affected and there are cavities, the injection of creasote causes a rapid destruction of the diseased tissue; if the patient is inclined to hæmoptysis, or if there is extensive tubercular infiltration, the injections are contra-indicated. After each injection, while cough and expectoration are increased, the temperature remains unchanged.

Van der Veset recommends the following preparations, as more palatable than creasote in oil:

I. Oil of sweet almonds, creasote, part. æq.; five to ten drops in two tablespoonsful of milk, three or four times a day.

II. Creasote, six grammes; tincture of nux vomica, eight grammes. Eight to ten drops in two tablespoonfuls of sweetened water, before meals, three to five times a day.

Struecker thinks that creasote is especially indicated in cases of "caseous puenmonia," but that it is contra-indicated in cases of advanced phthisis, or when there is tubercular ulceration of the bowels, or lardaceous degeneration.

Sommerbrodt gives the results of the administration of creasote in nearly 5,000 cases of phthisis. He never exceeded a daily dose of about eleven grains. Most of the patients improved; in recent cases, with lesions of limited extent, the results were surprisingly good; in advanced cases there was no improvement. Tubercular laryngitis was cured in several instances.

Fraentzel does not give creasote to febrile patients; when bacilli were numerous in the sputum, no diminution of their number was observed under treatment. Nausea, vomiting,

loss of appetite, gastralgia, fits of coughing, diarrhœa, and invincible repugnance to the drug were sometimes noted, and compelled him to discontinue it.

Sublinski confirms Fraentzel's results; he observed no modification in the number of bacilli, and does not regard hæmoptysis as a contra-indication to the use of creasote.

Sahli, and later Fraentzel, have used guaiacol, the active principle of creasote.

From these researches, creasote appears to be of advantage in many cases of phthisis, especially in recent ones; in very acute cases it is useless. It probably has an antibacillary action, and further certainly hinders the process of putrid intoxication. It must be given in sufficient doses, twelve to fifteen grains daily, and continued for a long time: the least irritating preparations should be chosen.—P. RODIAS, *L'Union médicale*, May 28th, 1889. J. M. C.

Exalgine.—Exalgine is chemically ortho-methylacetanilin, *i.e.* a methyl derivative of acetanilin or antifebrin. Exalgine, like the other bodies of its class, has antiseptic, antipyretic, and analgesic properties; the latter predominate. It relieves all kinds of neuralgic pains when given in one single dose of $3\frac{3}{4}$—6 grains; or 6—11 grains may be given in the 24 hours, in two separate doses. Its advantages over antipyrin are, that it is more effectual, and a smaller dose is efficient, while it produces no untoward results; slight erythema in one case is the only instance of toxic action hitherto noted. Like antipyrin, it diminishes the amount of the urine and of the sugar passed in diabetes.—DUJARDIN-BEAUMETZ, *Gazette des hôpitaux*, March 26th, 1889.

J. M. C.

Sulphurous Water in Laryngeal Tuberculosis.—Dr. J. Chardrac finds that the usual treatment at any watering-place where there are natural hot sulphur springs is very bad for this condition, and warns us against Cauterets, Eaux-Bonnes, and such places, as patients always return with the larynx showing signs of increase of irritation, ulceration, and so on.—*Revue de Laryngologie*, April 15th, 1889.

[Patients with phthisis of lungs or larynx are nowadays so frequently sent out of England, and by preference to some part of Europe, that it is necessary to remember that a health-resort which may be excellent for the pulmonary condition may be quite the reverse for the inflamed, infiltrated, and ulcerated larynx. For instance, Davos and Engadine Kurorts are, in my opinion and from personal observation, most un-

suitable for cases of phthisis laryngea, the dry, rarefied air being most irritating; in fact, "Davos throat," *i.e.* congestion of larynx and pharynx, is one of the inconveniences that many of the patients who reside there have to put up with, even though the throat was quite healthy before leaving home.] B. J. B.

On the Treatment of Exophthalmic Goitre.—Dr. Th. Schott, after alluding to the action of digitalis in controlling the palpitation of the heart; large doses of quinine, as recommended by Friedreich; iodides, as used by Trousseau, from which we undoubtedly derive help in these cases; belladonna, which has a quieting action on the nervous system—all of which are uncertain in this disease,—passes on to the consideration of some other less known methods of treatment:

(1) *Electricity*.—He recommends a weak constant current through the cervical sympathetic, or even the medulla, as giving us most satisfactory results.

[I have just now a most interesting case, in which there has been decided decrease in the volume and lessening of pulsation and hardening of the enlarged thyroid gland under frequent application of the constant current.]

(2) *Gymnastics*.—This was found to decrease the pulse, and to slow the breathing and make it more rhythmical.

(3) *Baths*.—Trousseau's recommendation of cold douches Schott thinks ought to be carried out with caution, as they are rather severe. He considers that those waters that contain carbonates and iron, *e.g.* Schwalbach, Pyrmont, &c., and also the hot baths of Nauheim, Rehme, &c., which are rich in carbonic acid, are very beneficial. Friedreich advises against sea-baths and residence at the seaside.

(4) *Elevated health-resorts*.—Schott recommends an elevation of 3,000 to 5,000 feet above sea-level, such as Engelberg, Black Forest, &c.—*Deutsche Medizinal-Zeitung*, April 18th, 1889. B. J. B.

Palliative Treatment of Epithelioma of Larynx and Pharynx by Tincture of Thuja Accidentalis.—Baratona has tried this drug in epithelioma affecting the larynx and pharynx, in doses of twenty drops to one drachm of the tincture, in the form of spray or otherwise applied to the parts. The action is beneficial in papilloma of the ear and nose, but it is useless in carcinoma and sarcoma. In two cases of laryngeal epithelioma the growths appear to have been arrested by the drug.—*La Pratique médicale*, No. 24, June 12th, 1889. B. J. B.

Some New Remedies in Diseases of the Throat.—Millican finds tincture of Aesculus hippocastanum, in three-drop doses in water every three hours, good for chronic laryngeal catarrh, with muddy colour and sluggish movement of the vocal cords. He also recommends two or three drops of tincture of arnica for throat-fatigue, with very little abnormal objective appearances. Bichromate of potash, in a dose of three drops of a solution of one grain in two ounces, was found of use in chronic laryngeal and pharyngeal catarrh, with thick, stringy mucus and irritative cough, and also when the capillaries of the pharynx and larynx are brightly injected, whether in acute or chronic conditions.—*Journal of Laryngology and Rhinology*, May, 1889. B. J. B.

Treatment of Gall-stones.—Rosenberg calls attention once more to the use of olive oil in this connection. His experiments show that after the inception of a large amount of oil or fat, a great increase in the secretion of bile, as well as a considerable dilution of it, takes place. As much as six ounces of olive oil may be given, and in many instances the addition of menthol, cognac, or finely-ground yolk of egg may be necessary to mask such a large quantity of fluid fat.—*Berliner klinische Wochenschrift*, Nos. 48 and 49, 1889. D. R. P.

Salicylate of Soda.—In the same article Rosenberg dwells on the value of this salt in cholelithiasis. In one case it was given in 15-grain doses, three times daily, in half a litre of hot water, and twice a day as a high rectal injection of 75 grains dissolved in a litre of warm water. The result was excellent—twenty-four hours after, gall-stones appearing in the stools. Stiller (*Wiener medizinische Presse*, No. 1, 1890) confirms this experience, using the remedy four times daily in 8-grain doses dissolved in soda water, sometimes combining with it ext. belladonnæ gr. $\frac{1}{6}$; he proposes to try it, perhaps in smaller doses in catarrhal jaundice. The same writer maintains that salicylate of soda possesses a strong diuretic action, and is very useful in promoting the rapid absorption of serous pleural exudations. Wertheimber (*Münchener medicinishe Wochenschrift*, No. 44, 1889) claims for it, from an experience of three cases, an almost specific effect in the treatment of universal pruritus. It was administered in doses of two tablespoonfuls of a three per cent. solution three times a day, and was followed, not only by relief, but by actual cure. D. R. P.

Sweating Feet.—For the treatment of this painful affection the following is recommended as a dusting powder (*Wiener klinische Wochenschrift*, No. 34, 1889): Acid. salicylic, 5; aluminis, 2; acid. tannici, 3; and amyl. trit., 90 parts. With regard to the use of chromic acid solution, which is used so generally for the same purpose in the German army, Prof. Kobert has pointed out the risk of the acid acting upon the small excoriations between the toes, and leading to serious ulceration.

A further method, recommended by Legoux, is as follows: By means of a brush or feather, the sole and parts between the toes are painted with the following mixture: Liq. ferri sesquichl., 3; glycerin., 1; and ol. bergamot., 2 parts. In a few days the sweat and odour disappear. D. R. P.

Vomiting of Pregnancy.—Gottschalk (*Berliner klinische Wochenschrift*, No. 40, 1889) was successful in a very obstinate case of vomiting, where even cocaine failed, by the administration of menthol in the following mixture:

Menthol	grs. xv.
S. V. R.	ʒ vi.
Aq. destill.	ad. ℥ vi.

A tablespoonful every hour.

After the third dose the vomiting ceased; next day the frequency of administration was lessened; and a few days later the patient was discharged. The addition of some cognac helps the solution of the menthol. Weiss (*Therapeutische Monatshefte*, No. 1, 1890,) prefers the following formula:

Menthol	grs. xv.
Solve in	
S. V. R.	ʒ vi.
Syr. sacchar.	℥ i.

A teaspoonful every hour. D. R. P.

Orthin.—It would be very desirable, in the interests of both patient and practitioner, were the procedure of Professors Kobert and Unverricht in the investigation of this substance generally adopted. The former, from theoretical considerations, suggested orthin—a hydrazin derivative—as an efficient antipyretic. The latter, in the same journal (*Deutsche medicinishe Wochenschrift*, No. 2, 1890), as a result of clinical trials, declares the drug of his colleague to be, of all the antipyretics yet introduced, the most dangerous and useless!

D. R. P.

Theobromin.—This is an excellent diruetic, strongly advocated by Gram of Copenhagen *(Therapeutische Monatshefte*, No. 1, 1890). As theobromin-sodium-salicylate, it is readily absorbed, and has no action on the heart. The diuresis is marked. The usual daily quantity given is 90 grains, in single doses of 15 grains. D. R. P.

The five following abstracts are translated from the *Deutsche Medizinal-Zeitung* and *Allgemeine medicinische Central-Zeitung :*

On the Mechanical Treatment of Erysipelas.—Dr. Wölfler has shown beyond question, by a new series of experiments, the efficacy of strips of plaster in the mechanical treatment of erysipelas. These can be fastened firmly, not only on the extremities, but also on the trunk and even on the shaven head. Care has to be taken that the strips, which must form a complete circle, do not become loosened, or are fastened again if they do. If the erysipelas has not yet reached to the strips, there is no special danger; but if that is the case the plaster is apt to soften and become loose in consequence of the increased temperature. If the erysipelas pass the strip with undiminished redness, it has certainly been badly fastened; but even across well-fastened strips, a much fainter pale-red colour may extend for a finger's breadth. For greater certainty, one can place a second strip at some distance from the first.—*Wiener klinische Wochenschrift*, Nos. 23, 24, and 25, 1889.

Kroell uses a guttapercha band in place of the plaster. Haberkorn gives internally benzoate of soda, four or five drachms daily; and Fox applies a compress moistened with a 1—4 per cent. solution of creasote. Calvelli paints the parts with one per cent. solution of picric acid, five or ten times a day.—*Deutsche Medizinal-Zeitung*, No. 85, 1889.

Dr. C. Rosenthal describes a combination of Pirogoff and Hueter's methods, which has succeeded when every other plan had failed. Pirogoff administers 2½ grains of camphor every hour or two, with hot drinks and other helps to perspiration. By Hueter's method the micrococcus is directly attacked by injections of three per cent. carbolic acid in the spot where it is, and a barrier, as it were, placed round the disease.

Favourable results are only obtained with cases taken at an early stage. Here numerous injections are made, with a disinfected Pravaz' syringe, in the subcutaneous tissue of the affected part of the skin. If it is about the size of the palm

of the hand, six or eight injections are made at a centimetre apart. In strong people these may be increased up to twelve or fifteen, without any sign of carbolic acid poisoning. If the disease is widely spread, only the worst parts are to be thus attacked, and after twelve or twenty-four hours a new series of injections is to be used. In early cases, treated actively, Hueter entirely removed the disease within twenty-four or forty-eight hours.—*Berliner klinische Wochenschrift*, No. 42, 1889.

J. Koch employs an ointment, consisting of creolin one part, lanolin ten parts, and iodoform four parts. This is painted once a day on the affected spot and for a finger's breadth beyond it. Guttapercha tissue is placed over it. Very good results have been obtained by this plan.—*Wiener klinische Wochenschrift*, No. 27, 1889. G. P.

On Disinfection of the Genital Canal.—The results of Drs. Doderlein and Günther as to reliable disinfection are:

(1.) Washing out the vagina with sublimate or carbolic lotion is not a certain method of disinfection.

(2.) The introduction of the finger, anointed with vaseline, hinders the effect of a washing-out.

(3.) If the vagina be washed out with sublimate or carbolic lotion so thoroughly that it is free from germs, it becomes dry and chapped.

(4.) Creolin-mollin is recommended instead of vaseline. By wiping and washing out the canal with a two per cent. Creolin lotion, it can be made aseptic without interference with the integrity of the mucous membrane.

On the ground of these experiments, disinfection was exclusively carried out in the Leipsic Clinic by three per cent. creolin emulsion, and very favourable results obtained. The hands were washed with soap and a brush for five minutes in hot water; the soap was then washed off in fresh water, and the hands lastly disinfected with warm sublimate or carbolic lotion. The canal was disinfected before each examination and after the birth, the labia being pressed together to retain the fluid for some time, so that every crevice and fold was purified. This was completed by anointing the vagina with mollin.

It is only fair to mention that these results contradict the successful ones of Steffeck, in Giessen, who found creolin far inferior to carbolic and sublimate disinfection.—*Archiv für Gynäkologie*, xxxiv., I., 1889. G. P.

Antipyrin.—Torpid ulcers of the leg become healthy and quickly cicatrize under antipyrin dressing. The pain-destroying and antiseptic qualities of antipyrin have been shown by Neudörfer, and are corroborated by Schreiber, who records that some extremely painful and obstinate varicose ulcers in a man seventy-two years of age healed quickly when daily dusted with antipyrin. G. P.

Salol.—This is an important remedy in all kinds of specific ulcers, both soft and hard, and of glandular swellings connected with them. It causes no pain, and is as powerful as iodoform in stopping the progress of sloughs. The rate of healing is perhaps slower; but in private practice the absence of all smell, and the easiness of the application, are great recommendations. It is used, mixed with starch, in the proportion of 2 to 1. Except for rheumatism and bladder troubles, it has little value when used internally.—SCHWIMMER, *Wiener medicinische Wochenschrift*, Nos. 3–9, 1889. G. P.

Phenyl Urethan.—This has been recommended by Guaconnini as a new antipyretic, antirheumatic, and analgesic. It is a product of the aromatic group of carbon compounds. It forms a white crystalline powder, insoluble in water, but easily in concentrated alcohol. He considers it a powerful antipyretic, without danger, and which has no unpleasant consequences. In doses of .5 of a gramme it reduces the temperature 1° to 3° Cent., and this lasts for nine to ten hours, causing profuse sweating. The temperature falls in from 20 to 40 minutes after administration. He regards it also as an active and painless remedy for chronic articular rheumatism, reducing both the pain and swelling. Doses of .5 of a gramme are sufficient.—*Zeitschrift des Apothekerverein*, November 10th, 1889. G. P.

The Mechanical Treatment of Locomotor Ataxia.—Since Charcot took up the suspension treatment of tabes according to the method of Motchutkowsky, every neurologist in Christendom has experimented with it, and contributed to current literature his favourable or unfavourable views as to its value. As is often the case with remedies advised in incurable diseases, it has had transitory beneficial effects in some patients; it has been followed by no result whatever in others, and in a few it has been productive of evil, and even of fatal, consequences. A large array of devices for the purpose of stretching the spine has been placed upon the market, from a modification of the mediæval inquisitorial

rack by a Vienna physician to the comparatively simple gibbet of Sayre. In many office corners the latter now stands idly by, a mute monument to many buried therapeutical hopes, or a three-legged mendicant acting as an office-servitor.

The practice of suspension for a minute or two or three, several times a week, does not seem to have accomplished everything that it promised; but as a passing fashion it has emphasised the fact that considerable good may result in many cases of disease of the spinal cord from the mere mechanical manipulation of the flexible canal containing it. It has furthermore led a number of medical troglodytes to ferret out from the dark caverns of literature old and similar methods, lost to sight until now or forgotten.

Branting, almost half a century ago, was accustomed to treat tabes by massage along the back while the patient was hanging by his hands to a horizontal bar; and in later works upon this subject, such as Hartelius's *Sjukgymnastik*, various flexing and twisting movements are recommended to be combined with massage in the treatment of this disorder. Some of the European mechanico-gymnastic institutions have long employed different species of friction and vibration for the same purpose.

Professor von Jürgensen has just called attention to a system of mechanical treatment begun by the German orthopædist, Hessing, more than fifteen years ago (*Medicinisch-chirurgisches Centralblatt*, January 3rd, 1890). Instead of stretching the spine for a few minutes at long intervals according to the Russian method of suspension, Hessing has supported and extended it day and night year after year by means of an accurately-fitted corset with flexible and extensible steel supports between the fixed points of the shoulder and pelvis on each side. It is maintained that extension of the spine may be induced in this way; but there is good ground for the statement of some orthopædists that apparatus of this kind can never be made to assume more than a quarter of the weight of the body borne by the spinal column. The shoulders are not fixed points; but, on the contrary, very movable and uncertain.

Hessing's method has been productive of improvement in cases of locomotor ataxia to about the same degree as when they have been treated by other mechanical means. There is probably some one underlying principle in all these systems; but exactly what change is brought about in the morbid process in the spinal cord by their employment, it is far from easy to determine. Release of compressed nervous elements

by the stretching of sclerotic tissues, improvement of the circulation in the blood-vessels and lymph-channels, and various other hypothetical influences have been adduced to explain the somewhat obscure phenomenon.

As some cases of tabes are susceptible of amelioration by any of the methods described, and as in all of them the fundamental object seems to be to attain a certain degree of extension of the spine, perhaps it would be best to abandon the more complicated methods and apparatus, and rely upon simple exercises capable of fulfilling the same purpose, such as hanging from a horizontal bar, bending over to touch the toes with the fingers while the legs are straight, and rotatory movements of the spinal column.—*New York Medical Journal*, March 8th, 1890. L. M. G.

HYGIENE.

Sulphur Worthless for Fumigation.—It appears that the prevailing method of disinfection by means of burning sulphur is considered by some of the leading bacteriologists as of less value than it has heretofore been considered. Dr. J. G. Johnson read a paper before the Kings County Medical Society on the 17th ult., in which he stated that he had proved the present system of fumigation as worthless for the destruction of disease-germs; that the fumes of burning sulphur do not penetrate woollens as disease-germs do. He also stated that he had propagated diphtheria from the clippings of blankets after they had undergone a thorough process of fumigation by burning sulphur. Dr. Prudden, of the New York City Board of Health, appears to have come to the same conclusion, and in both New York and Brooklyn currents of steam are to be recommended for disinfecting purposes instead of burning sulphur.—*The Medical Record*, January 4th, 1890.

L. M. G.

SCRAPS

PICKED UP BY THE ASSISTANT-EDITOR.

Good for Prescriptions.—School-teacher to anxious parent: "Your son is bright, intelligent, and getting along well in everything but handwriting." Parent: "That 's all right; his handwriting doesn't matter. I am going to make a doctor of him."—*Cincinnati Lancet-Clinic.*

Festina Lente.—Invalid: "I have been here at these springs, doctor, six weeks, and I don't see that the water has had the slightest effect." Dr. Candid: "You must have patience. There was a man here last season who didn't die until after he had been here two months."

An Impatient Child.—A case of Cæsarean section was down on the bills at one of our city clinics the other day; but the child would not wait, and came into the world by the usual route before the clinic day arrived.—*Medical Times and Register* quoted in *The Obstetric Gazette.*

Professional Advertising.—Amongst the younger medical men of this neighbourhood there is a keen observer who suggests that doctors who are desirous of being specially obtrusive might borrow an idea from the Railway Carriers, and affix to their carriages some such notice as this: "Upon request the driver of this vehicle will stop, and the doctor inside will, upon payment in advance, attend to any message that may be given."

Honour to whom Honour is Due.—The following "Birth Notices" appear in the *Cincinnati Enquirer*:—"FLAMIN.—Saturday, 9th inst., at 8.15 a.m., to the wife of D. W. Flamin, at College Hill, a ten-pound boy. Thanks to Dr. Wallingford, of Cincinnati." "GALLION.—June 5th, to Mrs. MONA GALLION, of Liberty Street, a nine-pound girl. Thanks to Dr. Wallingford." This is, doubtless, an effective way of advertising Dr. Wallingford's peculiar qualifications; but it would seem to us a little strange if Messrs. Flamin and Gallion should be content to allow the doctor all the credit for the happy occurrences.—*The Medical Age.*

Une Consultation.—L'annonce de la fermeture de la chasse a soulevé une nouvelle facétie à l'adresse de ceux de nos confrères qui cumulent les fonctions de disciple d'Esculape et de saint Hubert. En un jour de chasse, deux d'entre eux tirent un même perdreau avec tant d'ensemble que les deux coups de fusil n'en font qu'un. Le gibier tombe; les deux chasseurs se précipitent. "C'est moi qui l'ai tué," dit l'un. "C'est moi," dit l'autre. "Funeste effet d'une consultation," s'écrie l'amphitrion chez qui on chassait; "la mort du patient! Mais avouez, Messieurs, que, s'il agissait de la mort d'un client, vous mettriez moins d'empressement à vouloir vous l'attribuer."—*L'Union médicale.*

Posture in Labour.—This question, which was most interestingly treated by Dr. Engelmann in his *Labor among Primitive Peoples* in 1882, has been discussed by Dr. King in the *American Journal of Obstetrics*, No. 4, 1889. *The Medical Record* says that some of his "conclusions, if true, reflect little credit upon the modern obstetric art. If 'the normal mechanism of labor is still imperfectly understood,' it argues extraordinary dulness on the part of physicians who have been delivering babies since medical

science began. Furthermore, as over ninety per cent. of labors are normal, and take place in almost precisely the same way, it seems as though obstetricians should be able to tell the woman which would, with the greatest probability, be the proper position for her to adopt. Professor King, it seems, would leave the unhappy parturient uncertain whether she should squat like a Kaffir, hang from a rope like an Apache, kneel like a Mexican, hang to a pole like a Blackfoot squaw, stand like the Ceramites and ladies of the Nile, lie on the stomach like the Creeks, on the side like the English, or on the back like the Americans. It seems but fair that modern obstetrics should give parturient ladies less postural latitude than is implied in Dr. King's conclusions, which, we take it, are held to apply to the second stage of labor."

Antisepsis in Excelsis.—The fear of microbes, which is rapidly becoming a dominant factor in modern life, has lately received a curious illustration at Nordhausen, a small town in Prussian Saxony. A municipal edict has been issued that all barbers, hairdressers, and "tonsorial artists" generally shall, under legal penalties, well and truly disinfect their instruments every time after they have been used. This is, no doubt, a step in the right direction; but it is to be hoped that these enlightened councillors will not stop here in their career of sanitary progress. As so many doctors in Germany are at present perforce in the ranks of the "unemployed," why should they not be invited to revive in their own persons the defunct order of "barber-surgeons"? The idea of the Nordhausen municipality could then be carried out in a manner befitting its importance. Shaving might be performed as a surgical operation with all due antiseptic rites and ceremonies, the chin being afterwards dusted with "double cyanide" instead of violet powder. The carbolic spray would, of course, replace the orthodox "blow" of bay rum. When "Haircutting on Listerian Principles" meets the eye on every hairdresser's signboard, the illustrious founder of the antiseptic system may sing his *Nunc dimittis* with the proud consciousness that he has not lived in vain.—*The London Medical Recorder.*

An Unappreciative Physician.—Under the title "Good Books and Periodicals *versus* Ignorance and Laziness—a Rich Letter," the *Texas Health Journal* says: "The indifference of some at the current medical and sanitary literature of the age is passingly strange. It is a problem hard to solve. These reflections result from a recent incident incomprehensible in its immensity. A subscriber returned this *Journal* with the following soul-stirring revelation: 'Stop the Medical Health—am over red now—all I knead is treatment—got to big a library any how—besides I already take the theripudic gazet—dident subscribe for your *Journal* know how,—M.D.' We are confident this man is over 'red'—but just how 'red' we have no means of ascertaining—and that he thoroughly 'kneads' his treatment—blue mass especially. Being already over-stocked with the 'theripudic gazet,' and 'to big a library,' he 'dident' 'knead' the *Journal* 'know how'—therefore we feel indisposed to press our claims, lest the gentleman become overwhelmed with pure 'medical health.' Regretfully we leave him to the peaceful enjoyment of his erudition and peculiar vernacular. So long as such men are entrusted with human lives the cause of a high mortality in some localities may, with some degree of certainty, be surmised."—*The Medical and Surgical Reporter.*

In his reasons for discontinuing his *Journal*, the Texas doctor is not without his British representative. Equally funny excuses have been alleged by some who at one time subscribed to this *Journal*. May I suggest to existing subscribers that, as this is the first number of a new volume, the time is an excellent one for inducing their friends to take in the *Journal?*